CURRICULUM VITAE

Francis Halzen

Personal Information

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222 West Washington Avenue, Suite 500, Madison, WI 53703

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Education

1972 Agrégé de l'Enseignement Supérieur, KU-Leuven, Belgium

1969 Ph.D., KU-Leuven, Belgium

1966 Master's degree, KU-Leuven, Belgium

University of Wisconsin–Madison Positions

2021–present Vilas Research Professor

2001–present Principal Investigator and co-Spokesperson for the IceCube project

1987–present Gregory Breit Distinguished Professor

1984–present Director of the Institute for Elementary Particle Physics Research

1991–2021 Hilldale Professor

2013–2014 Acting Director of the Wisconsin IceCube Particle Astrophysics Center

1977 Romnes Faculty Fellow

1977 Professor

1974 Associate Professor

1972 Assistant Professor

1971 Research Associate

Education, Experience, and Awards

Experience

1996	Science Associate at CERN, Geneva, Switzerland
1987	NSF – Japan U.S. exchange, Univ. Tokyo, Japan
1985	Scientific Associate at CERN, Geneva, Switzerland
1983	Fellow of the Japan Society for the Promotion of Science, U of Tokyo
1982	Visiting Professor at the University of Durham, UK
1982	Nordita Professor at the University of Helsinki
1977–1983	Lector at the University of Louvain, Belgium
1980	Visiting Professor at the University of Hawaii-Honolulu
1977	Consultant at the Rutherford High Energy Laboratory, Oxford, UK
1977	Visiting Scientist at CERN, Geneva, Switzerland
1971–1983	Chercheur Agrégé of the National Science Foundation, Belgium
1969–1971	Scientific Associate at CERN, Geneva, Switzerland
1968–1969	Research Associate of the National Science Foundation, Belgium

Summer and Short-Term Positions

2012–13	Aspen Institute for Physics
2007	Summer program, CERN, Geneva, Switzerland
2007	Scientific Associate at CERN, Geneva, Switzerland
1988	Visiting Professor at the University of Durham, UK
1987	Visiting Professor at the University of Durham, UK
	Visitor in Joint Particle Physics & Astrophysics Program at Johns Hopkins University, Baltimore, MD
	NSF Japan – US Exchange, University of Tokyo, Japan
1984	Visiting Professor at the University of Durham, UK
1981	Visiting Senior Scientist of the Science Research Council at the University of Durham, UK
1980	Visiting Scientist at LRL, University of California-Berkeley
1975	Associate Scientist at the Brookhaven National Laboratory, Upton, NY
1974–1975	Consultant at the Argonne National Laboratory, Chicago, IL
1974	Consultant at Fermilab, Batavia, IL

1971 Consultant at the Rutherford High Energy Laboratory, Oxford, UK

Awards and Honors

2026 American Physical Society Medal for Exceptional Achievement in Research

Leon Lederman Lecture Series, Universidad de Guanajuato, Guatemala

2025 Doctor Honoris Causa, Simon Fraser University, Canada

Grubb-Parsons Lecture, Durham University, UK

2024 Member of the National Academy of Sciences

McPherson Lecture, McGill University

2023 Misel Family Lecture, University of Minnesota

2022 Doctor Honoris Causa, Ruhr University Bochum, Germany

2021 Homi Bhabha Prize and Medal, IUPAP

Bruno Rossi Prize, American Astronomical Society

2020 Yodh Lecture, University of California-Irvine

2019 Yodh Prize, IUPAP

Niels Bohr Lecture, NBI, Copenhagen

George and Maureen Ewan Lecture, Queens University, Canada

2018 Bruno Pontecorvo Prize, Joint Institute for Nuclear Research Scientific Council

Member Academia Europeae

Gleb Wataghin Colloquium, Instituto de Fisica, Sao Paolo, Brazil

22nd Kaczmarczik Lecture, Drexel University, Philadelphia

Victor Hess Lecture, Innsbruck Physics Lecture, Universität Innsbruck, Austria.

2017 Doctor Honoris Causa, Southern Methodist University

Julius Wess Award, Karlsruhe Institute of Technology

2016 Foreign member of the Belgian Royal National Academy of Science KVAB

Bethe lectures, Cornell

Brinson lectures, University of Chicago

2015 European Physical Society Cocconi Prize for Particle Astrophysics and Cosmology

Balzan Prize for Astroparticle Physics, Switzerland

2014 Doctor Honoris Causa, Ghent University, Belgium

Int'l Franqui Professor, VUB-ULB-UGent-UMons-UA-ULg-KULeuven, Belgium

Education, Experience, and Awards

	Smithsonian American Ingenuity Award
2013	*Physics World* Breakthrough of the Year Award, for making the first observation of cosmic neutrinos
	APS Highlights of the Year
	Franqui Int'l Chair, VUB – ULB – UGent – UMons – UA – ULg (Belgium)
	Hilldale Award, University of Wisconsin
2012	Affiliated Distinguished Professor, Technische Universität München, Germany
2010	Lecture for the Celebration of the 100th Anniversary of the Birth of Gunnar Kallen
2008	Watkins Professor at Wichita State University, Kansas
2006	Helmholtz-Humboldt Research Award, Germany
	First John Bahcall Memorial Lecture, Weizman Institute, Israel
	Spitzer Lectures at Princeton University
2005	Doctor of Philosophy Honoris Causa, Uppsala University, Sweden
	Halzen Mesa, Antarctica, named (lat. -77.39, long. 161.44)
2000	"Best American Science Writing 2000" for the essay *Antarctic Dreams*, published in *The Sciences*, New York Academy of Sciences (1999)
	Cherwell-Symon Memorial Lecture 2000, Oxford University, UK
1999	University of Wisconsin Sesquicentennial Award: four faculty positions awarded for the AMANDA/IceCube projects
1998	Korean Research Foundation: Collaborative Research with Foreign Distinguished Scholars
1997	"The Science Coalition" award, *Great Advances of 1996* for the AMANDA experiment, Washington, DC
1995	Fellow of the American Physical Society

Refereed Publications & arXiv Papers

Evaluating the Contribution of Active Galactic Nuclei to the Diffuse High-Energy Neutrino Flux (Samyak Jain, Dan Hooper, and Francis Halzen), arxiv: 2602.02390 [astro-ph.HE]

The Cosmic-ray Knee as a Local Signature of Nearby PeVatrons (Ke Fang and Francis Halzen), arxiv: 2601.05435 [astro-ph.HE]

A Seyfert galaxy as a hidden counterpart to a neutrino-associated blazar (Emma Kun, Santiago del Palacio, Imre Bartos, Francis Halzen et al.), arxiv: 2512.24178 [astro-ph.HE]

Neutrinos from primordial black holes in theories with extra dimensions (Luis A. Anchordoqui, Francis Halzen and Dieter Lust), arxiv: 2505.23414 [hep-ph], DOI: 10.1103/5kt2-5pvj, Phys. Rev. D 112 (2025) 8, 083034

Cascaded Gamma-Ray Emission Associated with the KM3NeT Ultrahigh-energy Event KM3-230213A (Ke Fang, Francis Halzen and Dan Hooper), arxiv: 2502.09545 [astro-ph.HE], DOI: 10.3847/2041-8213/adbbec, Astrophys. J. Lett. 982 (2025) 1, L16, Astrophys.J. 982 (2025) 1, L16

Evidence for neutrino emission from X-ray Bright Seyfert Galaxies in the Southern Hemisphere using Enhanced Starting Track Events with IceCube (IceCube Collaboration, Abbasi et al.), arxiv: 2602.10208 [astro-ph.HE]

Deep Search for Joint Sources of Gravitational Waves and High-Energy Neutrinos with IceCube During the Third Observing Run of LIGO and Virgo (IceCube and LIGO Scientific and VIRGO and KAGRA Collaborations, Abbasi et al.), arxiv: 2601.07595 [astro-ph.HE]

Prompt Searches for Very-high-energy γ-Ray Counterparts to IceCube Astrophysical Neutrino Alerts (FACT and H.E.S.S. and MAGIC and VERITAS and Fermi-LAT and IceCube Collaborations, Abhir et al.), arxiv: 2512.16562 [astro-ph.HE], DOI: 10.3847/1538-4357/ae2c4e, Astrophys. J. 997 (2026) 2, 141

Search for GeV-scale Dark Matter from the Galactic Center with IceCube-DeepCore (IceCube Collaboration, Abbasi et al.), arxiv: 2511.00918 [astro-ph.HE]

Limiting the Parameter Space for Unstable eV-scale Neutrinos Using IceCube Data (IceCube Collaboration, Abbasi et al.), arxiv: 2510.00209 [hep-ex]

Physics potential of the IceCube Upgrade for atmospheric neutrino oscillations (IceCube Collaboration, Abbasi et al.), arxiv: 2509.13066 [hep-ex]

Identification and Denoising of Radio Signals from Cosmic-Ray Air Showers using Convolutional Neural Networks (IceCube Collaboration, Abbasi et al.), arxiv: 2508.14711 [hep-ex]

The LED calibration systems for the mDOM and D-Egg sensor modules of the IceCube Upgrade: Design, production, testing and use in module calibration (IceCube Collaboration, Abbasi et al.), arxiv: 2508.03822 [astro-ph.IM], DOI: 10.1088/1748-0221/20/11/P11026, JINST 20 (2025) 11, P11026

Improved measurements of the TeV--PeV extragalactic neutrino spectrum from joint analyses of IceCube tracks and cascades (IceCube Collaboration, Abbasi et al.), arxiv: 2507.22234 [astro-ph.HE]

Refereed Publications & arXiv Papers

Evidence for a Spectral Break or Curvature in the Spectrum of Astrophysical Neutrinos from 5 TeV--10 PeV (IceCube Collaboration, Abbasi et al.), arxiv: 2507.22233 [astro-ph.HE]

Search for High-Energy Neutrinos From the Sun Using Ten Years of IceCube Data (IceCube Collaboration, Abbasi et al.), arxiv: 2507.08457 [hep-ex]

All-sky Neutrino Point-source Search with IceCube Combined Track and Cascade Data (IceCube Collaboration, Abbasi et al.), arxiv: 2507.07275 [astro-ph.HE], DOI: 10.3847/1538-4357/ae113f, Astrophys. J. 995 (2025) 1, 11

A Search for Millimeter-Bright Blazars as Astrophysical Neutrino Sources (IceCube and ACT Collaborations, Abbasi et al.), arxiv: 2507.03989 [astro-ph.HE]

Measurement of the mean number of muons with energies above 500 GeV in air showers detected with the IceCube Neutrino Observatory (IceCube Collaboration, Abbasi et al.), arxiv: 2506.19241 [hep-ex], DOI: 10.1103/lrjy-3hht, Phys. Rev. D 112 (2025) 8, 082004

GollumFit: An IceCube Open-Source Framework for Binned-Likelihood Neutrino Telescope Analyses (IceCube Collaboration, Abbasi et al.), arxiv: 2506.04491 [hep-ex]

Fast low energy reconstruction using Convolutional Neural Networks (IceCube Collaboration, Abbasi et al.), arxiv: 2505.16777 [astro-ph.HE], DOI: 10.1088/1748-0221/21/02/P02020, JINST 21 (2026) 02, P02020

Probing the PeV region in the astrophysical neutrino spectrum using νμ from the Southern sky (IceCube Collaboration, Abbasi et al.), arxiv: 2502.19776 [astro-ph.HE], DOI: 10.1103/2hnq-1fsx, Phys. Rev. D 112 (2025) 1, 012022

Seasonal variations of the atmospheric muon neutrino spectrum measured with IceCube (IceCube Collaboration, Abbasi et al.), arxiv: 2502.17890 [astro-ph.HE], DOI: 10.1140/epjc/s10052-025-14844-0, Eur. Phys. J. C 85 (2025) 12, 1368

Measurement of the inelasticity distribution of neutrino-nucleon interactions for $80\ \mathrm{GeV} < E_\nu < 560\ \mathrm{GeV}$ with IceCube DeepCore, (IceCube Collaboration, Abbasi et al.), arxiv: 2502.13299 [hep-ex], DOI: 10.1103/PhysRevD.111.112001, Phys. Rev. D 111 (2025) 11, 112001

Search for Heavy Neutral Leptons with IceCube DeepCore (IceCube Collaboration, Abbasi et al.), arxiv: 2502.09454 [hep-ex]

VERITAS and Multiwavelength Observations of the Blazar B3 2247+381 in Response to an IceCube Neutrino Alert (VERITAS and IceCube Collaborations, Atreya Acharyya et al.), arxiv: 2502.03853 [astro-ph.HE], DOI: 10.3847/1538-4357/adb30c, Astrophys. J. 982 (2025) 2, 80

Search for Extremely-High-Energy Neutrinos and First Constraints on the Ultrahigh-Energy Cosmic-Ray Proton Fraction with IceCube, (IceCube Collaboration, Abbasi et al.), arxiv: 2502.01963 [astro-ph.HE], DOI: 10.1103/PhysRevLett.135.031001, Phys. Rev. Lett. 135 (2025) 3, 031001

Refereed Publications & arXiv Papers

Time-integrated Southern-sky Neutrino Source Searches with 10 yr of IceCube Starting-track Events at Energies Down to 1 TeV (IceCube Collaboration, Abbasi et al.), arxiv: 2501.16440 [astro-ph.HE], DOI: 10.3847/1538-4357/ae2c86, Astrophys. J. 998 (2026) 1, 37

Search for neutrino doublets and triplets using 11.4 years of IceCube data (IceCube Collaboration, Abbasi et al.), arxiv: 2501.09276 [astro-ph.HE], DOI: 10.3847/1538-4357/adb312, Astrophys. J. 981 (2025), 159

Search for dark matter from the center of the Earth with ten years of IceCube data (IceCube Collaboration, Abbasi et al.), arxiv: 2412.12972 [astro-ph.HE], DOI: 10.1140/epjc/s10052-025-14144-7, Eur. Phys. J. C 85 (2025) 5, 490

Observation of Cosmic-Ray Anisotropy in the Southern Hemisphere with Twelve Years of Data Collected by the IceCube Neutrino Observatory (IceCube Collaboration, Abbasi et al.), arxiv: 2412.05046 [astro-ph.HE], DOI: 10.3847/1538-4357/adb1de, Astrophys. J. 981 (2025) 2, 182

Search for a light sterile neutrino with 7.5 years of IceCube DeepCore data (IceCube Collaboration, Abbasi et al.), arxiv: 2407.01314 [hep-ex], DOI: 10.1103/PhysRevD.110.072007 (publication), Phys. Rev. D 110 (2024) 7, 072007

IceCube Search for Neutrino Emission from X-ray Bright Seyfert Galaxies (IceCube Collaboration, Abbasi et al.), arxiv: 2406.07601 [astro-ph.HE], DOI: 10.3847/1538-4357/addd05, Astrophys. J. 988 (2025) 1, 141

Search for neutrino emission from hard X-ray AGN with IceCube (IceCube Collaboration, Abbasi et al.), arxiv: 2406.06684 [astro-ph.HE], DOI: 10.3847/1538-4357/ada94b, Astrophys. J. 981 (2025) 2, 131

Transforming Antarctic Ice into a Cherenkov Neutrino Detector, Francis Halzen and John Kelley; arxiv: 2411.15329 [astro-ph.HE], DOI: 10.1016/j.nima.2026.171372, Nucl. Instrum. Meth. A 1086 (2026) 171372

An NGC 1068-Informed Understanding of Neutrino Emission of the Active Galactic Nucleus TXS 0506+056, Arifa Khatee Zathul, Marjon Moulai, Ke Fang, and Francis Halzen; arxiv: 2411.14598 [astro-ph.HE], DOI: 10.3847/1538-4357/adc44d, Astrophys. J. 984 (2025) 1, 54

From the Dawn of Neutrino Astronomy to A New View of the Extreme Universe, C.A. Argüelles, F. Halzen, and N. Kurahashi; arxiv: 2405.17623 [hep-ex], DOI: 10.1103/1z9l-kb1d (publication), Phys. Rev. X 15 (2025) 3, 030501

Neutrinos from LHAASO Sources, Ke Fang, Francis Halzen; arxiv: 2404.15944 [astro-ph.HE]

Exploration of mass splitting and muon/tau mixing parameters for an eV-scale sterile neutrino with IceCube (IceCube Collaboration, Abbasi et al.), arxiv: 2406.00905 [hep-ex], DOI: 10.1016/j.physletb.2024.139077, Phys. Lett. B 858 (2024), 139077

Search for an eV-Scale Sterile Neutrino Using Improved High-Energy νμ Event Reconstruction in IceCube (IceCube Collaboration, Abbasi et al.), arxiv: 2405.08070 [hep-ex], DOI: 10.1103/PhysRevLett.133.201804, Phys. Rev. Lett. 133 (2024) 20, 201804

Methods and stability tests associated with the sterile neutrino search using improved high-energy νμ event reconstruction in IceCube (IceCube Collaboration, R. Abbasi et al.), arxiv: 2405.08077 [hep-ex], DOI: 10.1103/PhysRevD.110.092009, Phys. Rev. D 110 (2024) 9, 092009

Search for Joint Multimessenger Signals from Potential Galactic Cosmic-Ray Accelerators with HAWC and IceCube (HAWC and IceCube Collaborations, R. Alfaro et al.), arxiv: 2405.03817 [astro-ph.HE], DOI: 10.3847/1538-4357/ad812f, Astrophys. J. 976 (2024) 1, 8

Measurement of atmospheric neutrino oscillation parameters using convolutional neural networks with 9.3 years of data in IceCube DeepCore (IceCube Collaboration, Abbasi et al.), arxiv: 2405.02163 [hep-ex], DOI: 10.1103/PhysRevLett.134.091801, Phys. Rev. Lett. 134 (2025) 9, 091801

Acceptance Tests of more than 10 000 Photomultiplier Tubes for the multi-PMT Digital Optical Modules of the IceCube Upgrade (IceCube Collaboration, Abbasi et al.), arxiv: 2404.19589 [astro-ph.IM], DOI: 10.1088/1748-0221/19/07/P07038, JINST 19 (2024) 07, P07038

Observation of Seven Astrophysical Tau Neutrino Candidates with IceCube (IceCube Collaboration, Abbasi et al.), arxiv: 2403.02516 [astro-ph.HE], DOI: 10.1103/PhysRevLett.132.151001, Phys. Rev. Lett. 132 (2024) 15, 15

Improved modeling of in-ice particle showers for IceCube event reconstruction (IceCube Collaboration, Abbasi et al.), arxiv: 2403.02470 [astro-ph.HE], DOI: 10.1088/1748-0221/19/06/P06026, JINST 19 (2024) 06, P06026, JINST 19, P06026

Characterization of the astrophysical diffuse neutrino flux using starting track events in IceCube (IceCube Collaboration, Abbasi et al.), arxiv: 2402.18026 [astro-ph.HE], DOI: 10.1103/PhysRevD.110.022001, Phys. Rev. D 110 (2024) 2, 022001

Search for decoherence from quantum gravity with atmospheric neutrinos (IceCube Collaboration, Abbasi et al.), arxiv: 2308.00105 [hep-ex], DOI: 10.1038/s41567-024-02436-w, Nature Phys. 20 (2024) 6, 913-920

Astroparticles from X-Ray Binary Coronae, Ke Fang, Francis Halzen, Sebastian Heinz, John S. Gallagher, Astrophys. J. Lett. 975 (2024) 2, L35; arxiv: 2410.02119 [astro-ph.HE], DOI: 10.3847/2041-8213/ad887b

IceCube results and perspective for neutrinos from LHAASO sources, Ke Fang and Francis Halzen, JHEAp 43 (2024), 140-152; DOI: 10.1016/j.jheap.2024.07.001

Possible correlation between unabsorbed hard x rays and neutrinos in radio-loud and radio-quiet active galactic nuclei, Emma Kun, Imre Bartos, Julia Becker Tjus, Peter L. Biermann, Anna Franckowiak et al., Phys.Rev.D 110 (2024) 12, 123014; arxiv: 2404.06867 [astro-ph.HE], DOI: 10.1103/PhysRevD.110.123014

Thomas K. Gaisser, a pioneer of particle astrophysics, Francis Halzen and Paolo Lipari, Astropart. Phys. 159 (2024), 102963; arxiv: 2403.03207 [hep-ex], DOI: 10.1016/j.astropartphys.2024.102963

Refereed Publications & arXiv Papers

In situ estimation of ice crystal properties at the South Pole using LED calibration data from the IceCube Neutrino Observatory (IceCube Collaboration, Abbasi et al), The Cryosphere 18 (2024) 1, 75-102, DOI: 10.5194/tc-18-75-2024.

Citizen Science for IceCube: Name that Neutrino (IceCube Collaboration, Abbasi et al), Eur. Phys. J. Plus 139 (2024) 6, 533; arxiv: 2401.11994 [astro-ph.HE],], DOI: 10.1140/epjp/s13360-024-05179-y.

Search for 10–1,000 GeV neutrinos from Gamma Ray Bursts with IceCube (IceCube Collaboration, Abbasi et al), Astrophys. J. 964 (2024) 2, 126, Astrophys. J. 971 (2024) 2, 193; arxiv: 2312.11515 [astro-ph.HE], DOI: 10.3847/1538-4357/ad220b , 10.3847/1538-4357/ad683e (erratum).

All-Sky Search for Transient Astrophysical Neutrino Emission with 10 Years of IceCube Cascade Events (IceCube Collaboration, Abbasi et al), Astrophys .J. 967 (2024) 1, 48; DOI: 10.3847/1538-4357/ad3730; arxiv: 2312.05362 [astro-ph.HE].

Search for Continuous and Transient Neutrino Emission Associated with IceCube's Highest-Energy Tracks: An 11-Year Analysis (IceCube Collaboration, Abbasi et al); arxiv: 2309.12130 [astro-ph.HE].

Search for Galactic Core-collapse Supernovae in a Decade of Data Taken with the IceCube Neutrino Observatory (IceCube Collaboration, Abbasi et al), Astrophys. J. 961 (2024) 1, 84; arxiv: 2308.01172 [astro-ph.HE], DOI: 10.3847/1538-4357/ad07d1.

Search for Extended Sources of Neutrino Emission in the Galactic Plane with IceCube (IceCube Collaboration, Abbasi et al), Astrophys. J. 956 (2023) 1, 20; arxiv: 2307.07576 [astro-ph.HE], DOI: 10.3847/1538-4357/acf713.

Observation of high-energy neutrinos from the Galactic plane (IceCube Collaboration, Abbasi et al), Science 380 (2023) 6652, adc9818, Science 380, 6652; arxiv: 2307.04427 [astro-ph.HE], DOI: 10.1126/science.adc9818.

Search for Correlations of High-energy Neutrinos Detected in IceCube with Radio-bright AGN and Gamma-Ray Emission from Blazars (IceCube Collaboration, Abbasi et al), Astrophys. J. 954 (2023) 1, 75; arxiv: 2304.12675 [astro-ph.HE], DOI: 10.3847/1538-4357/acdfcb.

Measurement of atmospheric neutrino mixing with improved IceCube DeepCore calibration and data processing (IceCube Collaboration, Abbasi et al), Phys. Rev. D 108 (2023) 1, 012014; arxiv: 2304.12236 [hep-ex], DOI: 10.1103/PhysRevD.108.012014.

IceCat-1: The IceCube Event Catalog of Alert Tracks (IceCube Collaboration, Abbasi et al), Astrophys .J. Suppl. 269 (2023) 1, 25; arxiv: 2304.01174 [astro-ph.HE], DOI: 10.3847/1538-4365/acfa95.

A Search for IceCube Sub-TeV Neutrinos Correlated with Gravitational-wave Events Detected By LIGO/Virgo (IceCube Collaboration, Abbasi et al), Astrophys. J. 959 (2023) 2, 96; Astrophys. J. 971 (2024) 2, 192 (erratum); arxiv: 2303.15970 [astro-ph.HE], DOI: 10.3847/1538-4357/aceefc (publication), 10.3847/1538-4357/ad683f (erratum).

Refereed Publications & arXiv Papers

Search for neutrino lines from dark matter annihilation and decay with IceCube (IceCube Collaboration, Abbasi et al), Phys. Rev. D 108 (2023) 10, 102004; arxiv: 2303.13663 [astro-ph.HE], DOI: 10.1103/PhysRevD.108.102004.

Observation of seasonal variations of the flux of high-energy atmospheric neutrinos with IceCube (IceCube Collaboration, Abbasi et al), Eur. Phys. J. C 83 (2023) 9, 777; arxiv: 2303.04682 [astro-ph.HE], DOI: 10.1140/epjc/s10052-023-11679-5.

Constraining High-energy Neutrino Emission from Supernovae with IceCube (IceCube Collaboration, Abbasi et al), Astrophys.J.Lett. 949 (2023) 1, L12, Astrophys. J. 949 (2023) 1, L12; arxiv: 2303.03316 [astro-ph.HE], DOI: 10.3847/2041-8213/acd2c9.

Limits on Neutrino Emission from GRB 221009A from MeV to PeV Using the IceCube Neutrino Observatory (IceCube Collaboration, Abbasi et al), Astrophys. J. Lett. 946 (2023) 1, L26; Astrophys. J. Lett. 970 (2024) 2, L43 (erratum); arxiv: 2302.05459 [astro-ph.HE], DOI: 10.3847/2041-8213/acc077 (publication), 10.3847/2041-8213/ad654b (erratum).

A Search for Coincident Neutrino Emission from Fast Radio Bursts with Seven Years of IceCube Cascade Events (IceCube Collaboration, Abbasi et al), Astrophys. J. 946 (2023) 2, 80; arxiv: 2212.06702 [astro-ph.HE], DOI: 10.3847/1538-4357/acbea0.

Search for sub-TeV Neutrino Emission from Novae with IceCube-DeepCore (IceCube Collaboration, Abbasi et al), Astrophys. J. 953 (2023) 2, 160; arxiv: 2212.06810 [astro-ph.HE], DOI: 10.3847/1538-4357/acdc1b.

Detecting neutrinos in IceCube with Cherenkov light in the South Pole ice (IceCube Collaboration, Yuan), Nucl. Instrum. Meth. A 1054 (2023), 168440; arxiv: 2212.12142 [astro-ph.IM], DOI: 10.1016/j.nima.2023.168440.

Searches for Neutrinos from Large High Altitude Air Shower Observatory Ultra-high-energy γ-Ray Sources Using the IceCube Neutrino Observatory (IceCube Collaboration, Abbasi et al), Astrophys. J. Lett. 945 (2023) 1, L8; arxiv: 2211.14184 [astro-ph.HE], DOI: 10.3847/2041-8213/acb933.

Constraints on Populations of Neutrino Sources from Searches in the Directions of IceCube Neutrino Alerts (IceCube Collaboration, Abbasi et al), Astrophys. J. 951 (2023) 1, 45; arxiv: 2210.04930 [astro-ph.HE], DOI: 10.3847/1538-4357/acd2ca.

IceCube Search for Neutrinos Coincident with Gravitational Wave Events from LIGO/Virgo Run O3 (IceCube Collaboration, Abbasi et al), Astrophys. J. 944 (2023) 1, 80; arxiv: 2208.09532 [astro-ph.HE], DOI: 10.3847/1538-4357/aca5fc.

Searches for connections between dark matter and high-energy neutrinos with IceCube (IceCube Collaboration, Abbasi et al), JCAP 10 (2023), 003; arxiv: 2205.12950 [hep-ex], DOI: 10.1088/1475-7516/2023/10/003.

Searching for temporary gamma-ray dark blazars associated with IceCube neutrinos (Kun, et al), Astron. Astrophys. 679 (2023), A46; astro-ph.HE/2305.06729.

Milky Way as a Neutrino Desert Revealed by IceCube Galactic Plane Observation (Fang, et al), Nature Astronomy (2023), DOI: 10.1038/s41550-023-02128-0; astro-ph.HE/2306.17275.

High-energy Neutrinos from the Inner Circumnuclear Region of NGC 1068 (Fang, et al) Astrophys. J. **956** 1 8 (2023); astro-ph.HE/2307.07121.

D-Egg: a Dual PMT Optical Module for IceCube (IceCube Collaboration, Abbasi et al), JINST 18 (2023) 04, P04014; astro-ph.IM/2212.14526.

Searches for Neutrinos from LHAASO ultra-high-energy y-ray sources using the IceCube Neutrino Observatory (IceCube Collaboration, Abbasi et al), (2022); astro-ph.HE/2211.14184.

Detection of astrophysical tau neutrino candidates in IceCube (IceCube Collaboration, Abbasi et al), Eur. Phys. J. C **82** 11 1031 (2022); hep-ex/2011.03561.

Searches for Neutrinos from Gamma-Ray Bursts Using the IceCube Neutrino Observatory (IceCube and Fermi Gamma-ray Burst Monitor Collaborations, Abbasi et al), Astrophys. J. 939 1 116 (2022); Astro-he.HE/2205.11410.

Graph Neural Networks for low-energy event classification & reconstruction in IceCube (IceCube Collaboration, Abbasi et al), JINST **17** 11, P11003 (2022); hep-ex/2209.03042.

Evidence for neutrino emission from the nearby active galaxy NGC 1068 (IceCube Collaboration, Abbasi et al), Science **378** 6619, 538-543 (2022); astro-ph.HE/2211.09972.

Search for quantum gravity using astrophysical neutrino flavour with Icecube (IceCube Collaboration, Abbasi et al), Nature Phys. **18** 11 1287-1292 (2022); hep-ex/2111.04654.

Searching for High-energy Neutrino Emission from Galaxy Clusters with IceCube (IceCube Collaboration, Abbasi et al), Astrophys. J. Lett. **938** L11 (2022); astro-ph.HE/2206.02054.

Search for Astrophysical Neutrinos from 1FLE Blazars with IceCube (IceCube Collaboration, Abbasi et al), Astrophys. J. **938** 1, 28 (2022); astro-ph.HE/2207.04946.

Search for Unstable Sterile Neutrinos with the IceCube Neutrino Observatory (IceCube Collaboration, Abbasi et al), Phys. Rev. Lett **129** 15 15 (2022); hep-ex/2204.00612.

Low energy event reconstruction in IceCube DeepCore (IceCube Collaboration, Abbasi et al), Eur. Phys. J. C. **82** 9 807 (2022); hep-ex/2203.02303.

Density of GeV muons in air showers measure with IceTop (IceCube Collaboration, Abbasi et al), Phys. Rev. D. 106 3 032010 (2022); hep-ex/2201.12635.

Multiwavelength Search for the Origin of IceCube's Neutrinos (Kun et al) Astrophys. J. **934** 1 180 (2022); astro-ph.HE/2203.14780.

Search for Spatial Correlations of Neutrinos with Ultra-high-energy Cosmic Rays (IceCube and Pierre Auger and Telescope Array and Auger and ANTARES Collaborations, Albert et al), Astrophys. J. 934 2 164 (2022); astro-ph.HE/2201.07313.

Search for neutrino emission from cores of active galactic nuclei (IceCube Collaboration, Abbasi et al), Phys. Rev. D. 106 2 022005 (2022); astro-ph.HE/2111.10169.

Refereed Publications & arXiv Papers

The TeV Diffuse Cosmic Neutrino Spectrum and the Nature of Astrophysical Neutrino Sources (Fang, Gallagher), Astrophys. J. 933 2 190 (2022); astro-ph.HE/2205.03740.

The observation of high-energy neutrinos from the cosmos: Lessons learned for multimessenger astronomy (Halzen), Int. J. Mod. Phys. D 31 03 (2022); Astro-ph-HE/2110.01687.

Strong constraints on Neutrino Nonstandard Interactions from TeV-Scale νu Disappearance at IceCube (IceCube Collaboration, Abbasi et al), Phys. Rev. Lett. **129** 1 1 (2022); hep-ex/2201.03566.

Framework and tools for the simulation and analysis of the radio emission from air showers at IceCube (IceCube Collaboration, Abbasi et al), JINST **17** 06 P06026 (2022); Astro-ph.HE/2205.02258.

Searches for Connection between Dark Matter and High-Energy Neutrinos with IceCube (IceCube Collaboration, Abbasi et al), (2022); hep-ex/2205.12950.

Search for High-energy Neutrino Emission from Galactic X-Ray Binaries with IceCube (IceCube Collaboration, Abbasi et al), Astrophys. J. Lett. **930** 2 L24 (2022); astro-ph.HE/2202.11722.

PeV Tau Neutrinos to Unveil Ultra-High-Energy Sources (with Arguelles, Kheirandish, Safa) (2022); astro-ph.HE/2203.13827.

Improved Characterization of the Astrophysical Muon-neutrino Flux with 9.5 Years of IceCube Data (IceCube Collaboration, Abbasi et al), Astrophys. J. **928** 1 50 (2022); astro-ph.HE/2111.10299.

Search for GeV-scale dark matter annihilation in the Sun with IceCube DeepCore (IceCube Collaboration, Abbasi et al), Phys. Rev. D 105 6 062004 (2022); astro-ph.HE/2111.09970.

Search for High-energy Neutrinos from Ultraluminous Infrared Galaxies with IceCube (IceCube Collaboration, Abbasi et al), Astrophys. J. **926** 1 59 (2022); astro-ph.HE/2107.03149.

Search for Relativistic Magnetic Monopoles with Eight Years of IceCube Data (Icecube Collaboration, Abbasi et al), Phys. Rev .Lett. **128** 5 051101 (2022); astro-ph.HE/2109.13719.

IceCube and High-Energy Cosmic Neutrinos (with Kheirandish), Accepted by Neutrino Physics and Astrophysics (2022); astro-ph.HE/2202.00694.

First all-flavor search for transient neutrino emission using 3-years of IceCube DeepCore data (IceCube Collaboration, Abbasi et al), JCAP **01** 027 (2022); Astro-ph.HE/2011.05096.

High-Energy Neutrinos from the Cosmos, Annalen Phys. **533** 11, 2100309 (2021); DOI: 10.1002/andp.202100309.

Cosmic Neutrinos from Temporarily Gamma-suppressed Blazars (with Emma Kun, Imre Bartos, Julia Becker Tjus, Peter L Biermann, and György Mező) ApJL **911** 2 (2021) L18; DOI: 10.3847/2041-8213/abf1ec.

Refereed Publications & arXiv Papers

Search for Relativistic Magnetic Monopoles with Eight Years of IceCube Data (IceCube Collaboration, Abbasi et al.), Phys. Rev. Lett. **128** 051101 (2022); arXiv:2109.13719.

Search for Multi-Flare Neutrino Emissions in 10 Years of IceCube Data from a Catalog of Sources (IceCube Collaboration, Abbasi et al.), ApJL **920** L45 (2021); DOI: 10.3847/2041-8213/ac2c7b.

A Muon-Track Reconstruction Exploiting Stochastic Losses for Large-Scale Cherenkov Detectors (IceCube Collaboration, Abbasi et al.), JINST **16** (2021) P08034; DOI: 10.1088/1748-0221/16/08/P08034.

IceCube Data for Neutrino Point-Source Searches Years 2008-2018 (IceCube Collaboration, Abbasi et al.); DOI: 10.21234/CPKQ-K003.

All-flavor Constraints on Nonstandard Neutrino Interactions and Generalized Matter Potential with Three Years of IceCube DeepCore data (IceCube Collaboration, Abbasi et al), Phys. Rev. D **104** (2021) 072006; DOI: 10.1103/PhysRevD.104.072006.

A Convolutional Neural Network based Cascade Reconstruction for the IceCube Neutrino Observatory (IceCube Collaboration, Abbasi et al.), JINST **16** (2021) P07041; DOI: 10.1088/1748-0221/16/07/P07041.

Search for High-Energy Neutrinos from Ultraluminous Infrared Galaxies with IceCube (IceCube Collaboration, Abbasi et al.), ApJ **926** 59 (2022); arXiv:2107.03149.

Probing Neutrino Emission at GeV Energies from Compact Binary Mergers with the IceCube Neutrino Observatory (IceCube Collaboration, Abbasi et al.), Phys. Rev. D 113 (2026) 4, 042003; arXiv:2105.13160.

Search for GeV Neutrino Emission During Intense Gamma-Ray Solar Flares with the IceCube Neutrino Observatory (IceCube Collaboration, Abbasi et al.), Phys. Rev. D **103** (2021) 102001; DOI: 10.1103/PhysRevD.103.102001.

Detection of a Particle Shower at the Glashow Resonance with IceCube (IceCube Collaboration, Aartsen et al.), Nature **591** (2021) 220-224; DOI: 10.1038/s41586-021-03256-1.

Measurements of the time-dependent cosmic-ray Sun shadow with seven years of IceCube data: Comparison with the Solar cycle and magnetic field models (IceCube Collaboration, Aartsen et al.), Phys. Rev. D **103** (2021) 04200; DOI: 10.1103/PhysRevD.103.042005.

Multimessenger Gamma-Ray and Neutrino Coincidence Alerts Using HAWC and IceCube Subthreshold Data (IceCube Collaboration, Solares et al.), Astrophys. J. **906** 1 63 (2021); astro-ph.HE/2008.10616.

LeptonInjector and LeptonWeighter: A neutrino event generator and weighter for neutrino observatories (IceCube Collaboration, Abbasi et al.), Comput. Phys. Commun. **266** 108018 (2021); DOI: 10.1016/j.cpc.2021.108018.

Refereed Publications & arXiv Papers

Follow-up of astrophysical transients in real time with the IceCube Neutrino Observatory (IceCube Collaboration, Abbasi et al.), Astrophys. J. **910** 4 (2021); DOI: 10.3847/1538-4357/abe123 .

A search for time-dependent astrophysical neutrino emission with IceCube data from 2012 to 2017 (IceCube Collaboration, Abbasi et al.), Astrophys. J. **911** 1 67 (2021); DOI: 10.3847/1538-4357/abe7e6.

Search for sub-TeV neutrino emission from transient sources with three years of IceCube data (IceCube Collaboration, Abbasi et al.), JCAP **01** 027 (2022); arXiv:2011.05096.

Measurement of the high-energy all-flavor neutrino-nucleon cross section with IceCube (IceCube Collaboration, Abbasi et al.), Phys. Rev. D **104** 022001 (2021); DOI: 10.1103/PhysRevD.104.022001.

Detection of astrophysical tau neutrino candidates in IceCube (IceCube Collaboration), Eur. Phys. J. C **82** 1031 (2022); arXiv:2011.03561.

The IceCube high-energy starting event sample: Description and flux characterization with 7.5 years of data (IceCube Collaboration), Phys. Rev. D **104** 022002 (2021); DOI: 10.1103/PhysRevD.104.022002.

Computational techniques for the analysis of small signals in high-statistics neutrino oscillation experiments (IceCube Collaboration), Nucl. Instrum. Meth. A **977** (2020), 164332; physics.data-an/1803.05390.

IceCube-Gen2: The Window to the Extreme Universe (IceCube Gen2 Collaboration, Aartsen et al.), J. Phys. G **48** 6 060501 (2021); DOI: 10.1088/1361-6471/abbd48.

Combined Search for Neutrinos from Dark Matter Self-Annihilation in the Galactic Centre with ANTARES and IceCube (ANTARES and IceCube Collaborations, Albert et al.),) Phys. Rev. D **102** (2020) 082002; DOI: 10.1103/PhysRevD.102.082002.

Characteristics of the Diffuse Astrophysical Electron and Tau Neutrino Flux with Six Years of IceCube High Energy Cascade Data (IceCube Collaboration, Aartsen et al.), Phys. Rev. Lett. **125** (2020) 12110; DOI: 10.1103/PhysRevLett.125.121104.

Velocity Independent Constraints on Spin-Dependent DM-Nucleon Interactions from IceCube and PICO (IceCube Collaboration, Aartsen et al.), Eur. Phys. J. C80 (2020) 819; DOI: 10.1140/epjc/s10052-020-8069-5.

Cosmic Ray Spectrum and Composition from Three Years of IceTop and IceCube (IceCube Collaboration, K. Rawlins et al.), Phys. Atom. Nucl. **83** 2 280-284 (2020); DOI: 10.1134/S1063778820020234.

Measurements of Cosmic Ray Muon Distributions with IceTop and IceCube (IceCube Collaboration with K. Rawlins), Phys. Atom. Nucl. **83** 2 285-289 (2020) 2; DOI: 10.1134/S1063778820020246.

Cosmic Ray Spectrum from 250 TeV to 10 PeV using IceTop (IceCube Collaboration, Aartsen et al.), Phys. Rev. D **102** 122001 (2020); DOI: 10.1103/PhysRevD.102.122001.

Searching for eV-scale sterile neutrinos with eight years of atmospheric neutrinos at the IceCube Neutrino Telescope (IceCube Collaboration, Aartsen et al.), Phys. Rev. D **102** 5 052009 (2020); DOI: 10.1103/PhysRevD.102.052009.

eV-Scale Sterile Neutrino Search Using Eight Years of Atmospheric Muon Neutrino Data from the IceCube Neutrino Observatory (IceCube Collaboration, Aartsen et al.), Phys. Rev. Lett. **125** 14 141801 (2020); DOI: 10.1103/PhysRevLett.125.141801.

IceCube Search for Neutrinos Coincident with Compact Binary Mergers from LIGO-Virgo's First Gravitational-wave Transient Catalog (IceCube Collaboration, Aartsen et al.), Astrophys. J. Lett. **898** 1 L10 (2020); DOI: 10.3847/2041-8213/ab9d24.

IceCube Search for High-Energy Neutrino Emission from TeV Pulsar Wind Nebulae (IceCube Collaboration, Aartsen et al.), Astrophys. J. **898** 2 117 (2020); DOI: 10.3847/1538-4357/ab9fa0.

Combined search for neutrinos from dark matter self-annihilation in the Galactic Center with ANTARES and IceCube (ANTARES and IceCube Collaborations, A. Albert et al.), Phys. Rev. D **102** 8 082002 (2020); astro-ph.HE/2003.06614.

In-situ calibration of the single-photoelectron charge response of the IceCube photomultiplier tubes (IceCube Collaboration, Aartsen et al.), JINST **15** 06 06 (2020); DOI: 10.1088/1748-0221/15/06/P06032.

Characteristics of the diffuse astrophysical electron and tau neutrino flux with six years of IceCube high energy cascade data (IceCube Collaboration, M.G. Aartsen et al.), Phys. Rev. Lett. **125** 12 121104 (2020); astro-ph.HE/2001.09520.

Neutrino emission during the γ-suppressed state of blazars (with Emma Kun et al.); astro-ph.HE/2009.09792.

Black holes associated with cosmic neutrino flares (with Ali Kheirandish), Nature Phys. **16** 5 498-500 (2020); DOI: 10.1038/s41567-020-0864-2.

ANTARES and IceCube Combined Search for Neutrino Point-like and Extended Sources in the Southern Sky (IceCube Collaboration), Astrophys. J. **892** 92 (2020); DOI: 10.3847/1538-4357/ab7afb.

A search for IceCube events in the direction of ANITA neutrino candidates (IceCube Collaboration), Astrophys. J. **892** 53 (2020); DOI: 10.3847/1538-4357/ab791d.

Observing EeV neutrinos through Earth: GZK and the anomalous ANITA events (with Ibrahim Safa, Alex Pizzuto, Carlos A. Argüelles, Raamis Hussain, Ali Kheirandish, and Justin Vandenbroucke,) JCAP **01** 012 (2020); hep-ph/1909.10487.

Neutrinos below 100 TeV from the Southern sky employing refined veto techniques to IceCube data (IceCube Collaboration), Astrop. Phys. **116** 102392 (2020); astro-ph.HE/1902.05792.

Development of an analysis to probe the neutrino mass ordering with atmospheric neutrinos using three years of IceCube DeepCore data (IceCube Collaboration), European Physical Journal C**80** (2020) 009l; hep-ex/1902.07771.

Searches for neutrinos from cosmic-ray interactions in the Sun using seven years of IceCube data (IceCube Collaboration), JCAP **02** 025 (2021); DOI: 10.1088/1475-7516/2021/02/025.

Constraints on Neutrino Emission from Nearby Galaxies Using the 2MASS Redshift Survey and IceCube (IceCube Collaboration), JCAP **7** 042 (2020); astro-ph.HE:1911.11809

Combined sensitivity to the neutrino mass ordering with JUNO, the IceCube Upgrade, and PINGU (IceCube-Gen2 and JUNO Collaborations), Phys. Rev. D **101** 032006 (2020); hep-ex/1911.06745

Neutrino astronomy with the next generation IceCube Neutrino Observatory (IceCube-Gen2 Collaboration), submitted to Astro2020; astro-ph.HE/1911.02561.

Time-integrated Neutrino Source Searches with 10 years of IceCube Data (IceCube Collaboration), Phys. Rev. Lett. **124** 051103 (2020); astro-ph.HE/1910.08488.

Design and Performance of the first IceAct Demonstrator at the South Pole **(**IceCube-Gen2 Collaboration)**,** JINST **15** T02002 (2020); astro-ph.IM1910.06945.

A Search for Neutrino Point-Source Populations in 7 Years of IceCube Data with Neutrino-count Statistics (IceCube Collaboration), Astrophys. J. **893** 102 (2020); astro-ph.HE/1909.08623.

Cosmic Ray Spectrum and Composition from PeV to EeV Using 3 Years of Data From IceTop and IceCube (IceCube Collaboration, Aartsen et al.), Phys. Rev. D **100** (2019) 082002; DOI: 10.1103/PhysRevD.100.082002.

Search for Multimessenger Sources of Gravitational Waves and High-energy Neutrinos with Advanced LIGO during its first Observing Run, ANTARES and IceCube (ANTARES, IceCube, LIGO, Virgo Collaborations, Albert et al.), Astrophys. J **870** (2019) 134; DOI: 10.3847/1538-4357/aaf21d.

Efficient propagation of systematic uncertainties from calibration to analysis with the SnowStorm method in IceCube (IceCube Collaboration), JCAP **10** 048 (2019); hep-ex/1909.01530.

Search for PeV Gamma-Ray Emission from the Southern Hemisphere with 5 Years of Data from the IceCube Observatory (IceCube Collaboration), Astrophys. J. **891** 9 (2020); astro-ph.HE/1908.09918.

A Search for MeV to TeV Neutrinos from Fast Radio Bursts with IceCube (IceCube Collaboration), Astrophys.J. **890** 111 (2020); astro-ph.HE/1908.09997.

Velocity-independent constraints on spin-dependent DM-nucleon interactions from IceCube and PICO (PICO and IceCube collaborations), Eur. Phys. J. C **80** 819 (2020); DOI: 10.1140/epjc/s10052-020-8069-5.

Search for sources of astrophysical neutrinos using 7 years of IceCube cascade events (IceCube Collaboration), Astrophys. J. **886** 12 (2019); hep-ex/1907.06714.

Multimessenger search for the sources of cosmic rays using cosmic neutrinos (with Ali Kheirandish), Front. Astron. Space Sci. **6** 32 (2019).

Cosmic-Ray Spectrum and Composition from PeV to EeV Using 3 years of Data from IceTop and IceCube (IceCube Collaboration), Phys. Rev. D **100** 082002 (2019); hep-ex/1906.04317.

Monitoring and Multi-Messenger Astronomy with IceCube (IceCube Collaboration), Galaxies **7** 40 (2019).

High-energy Galactic cosmic rays (Astro2020 Science White Paper) (with Frank Schröder, et al.), Bull. Am. Astron. Soc. **51** 3 131 (2019); astro-ph.HE/1903.07713.

Astrophysics uniquely enabled by observations of high-energy cosmic neutrinos (Astro2020 Science White Paper) (with Markus Ackermann et al.), Bull. Am. Astron. Soc. **51** 185 (2019); astro-ph.HE/1903.04334.

Fundamental physics with high-energy cosmic neutrinos (Astro2020 Science White Paper) (with Markus Ackermann et al.), Bull. Am. Astron. Soc. **51** 215 (2019); astro-ph.HE/1903.04333.

Search for transient optical counterparts to high-energy IceCube neutrinos with Pan-STARRS1 (Pan-STARRS and IceCube collaborations), Astron. Astrophys. **626** A117 (2019); hep-ex/1901.11080.

Investigation of two Fermi-LAT gamma-ray blazars coincident with high-energy nus detected by IceCube (Fermi-LAT, ASAS-SN and IceCube collaborations), Astrophys. J. **880** 103 (2019); hep-ex/1901.10806.

Measurement of atmospheric tau neutrino appearance with IceCube DeepCore (IceCube Collaboration), Phys. Rev. D **99** 032007 (2019); hep-ex/1901.05366v1.

All-sky measurement of the anisotropy of cosmic rays at 10 TeV and mapping of the local interstellar magnetic field (HAWC and IceCube collaborations), Astrophys. J. **871** 96 (2019); astro-ph.HE/1812.05682.

Search for steady point-like sources in the astrophysical muon neutrino flux with 8 years of IceCube data (IceCube Collaboration), Eur. Phys. J. C **79** 234 (2019); astro-ph.HE/ 1811.07979.

On the neutrino flares from the direction of TXS 0506+056 (with Ali Kheirandish, et al.), Astrophys. J. **874** 1 L9 (2019); astro-ph.HE/1811.07439.

Detection of the temporal variation of the Sun's cosmic ray shadow with the IceCube detector (IceCube Collaboration), Astrophys. J. **872** 133 (2019); hep-ex/1811.02015.

Search for multi-messenger sources of gravitational waves and high-energy neutrinos with advanced LIGO during its first observing run (ANTARES, IceCube, LIGO, and Virgo collaborations), Astrophys. J. **870** 134 (2019); astro-ph.HE/1810.10693.

IceCube: Opening a new window on the Universe from the South Pole, Int. J. Mod. Phys. D **28** 03 1930007 (2018).

Measurements using the inelasticity distribution of multi-TeV neutrino interactions in IceCube (IceCube Collaboration), Phys. Rev. D **99** 032004 (2019); hep-ex/1808.07629.

Joint constraints on Galactic diffuse neutrino emission from the ANTARES and IceCube neutrino telescopes (ANTARES and IceCube collaborations), Astrophys. J. Lett. **868** L20 (2018); astro-ph.HE/1808.03531.

Neutrino emission from the direction of the blazar TXS0506+056 prior to the IceCube-170922A alert (IceCube Collaboration), Science **361** 147 (2018); astro-ph.HE/1807.08794.

Multimessenger observations of a flaring blazar coincident with high-energy neutrino IceCube-170922A (IceCube, Fermi-LAT, MAGIC, AGILE, ASAS-HN, HAWC, H.E.S.S., INTEGRAL, Kanata, Kiso, Liverpool Telescope, Subaru, Swift/NuSTAR, VERITAS and VLA/178-403 collaborations and teams), Science **361** eaat1378 (2018); astro-ph.HE/1807.08816.

Constraints on minute-scale transient astrophysical neutrino sources (IceCube Collaboration), Phys. Rev. Lett. **122** 051102; astro-ph.HE/1807.11492.

Differential limit on the extremely high-energy cosmic neutrino flux in the presence of astrophysical background from 9 years of IceCube data (IceCube Collaboration), Phys. Rev. D **98** 062003 (2018); astro-ph.HE/1807.01820.

Opening a new window onto the Universe with IceCube (with Markus Ahlers), Progress in Particle and Nuclear Physics **102** 73 (2018); astro-ph.HE/1805.11112.

Search for neutrinos from decaying dark matter with IceCube (IceCube Collaboration), Euro. Phys. J. C **78** 831 (2018); astro-ph.HE/1804.03848.

High-energy astrophysical neutrinos, Adv. Ser. Direct. High Energy Phys. **28** 325 (2018).

A search for neutrino emission from fast radio bursts with 6 years of IceCube data (IceCube Collaboration), Astrophys. J. **857** 117 (2018); hep-ex/1712.06277.

Measurement of the multi-TeV neutrino cross section with IceCube using Earth absorption (IceCube Collaboration), Nature **551** 596 (2017); hep-ex/1711.08119.

Search for high-energy neutrinos from binary neutron star merger GW170817 with ANTARES, IceCube and the Pierre Auger Observatory (ANTARES, IceCube, Auger, LIGO Scientific and Virgo collaborations), Astrophys. J. Lett. **850** L35 (2017); astro-ph.HE/ 1710.05839.

Multi-messenger observations of a binary neutron star merger (IceCube Collaboration with LIGO Scientific and Virgo collaborations, et al), Astrophys. J. Lett. **848** L12 (2017); astro-ph.HE/1710.05833.

Search for non-standard neutrino interactions with IceCube DeepCore (IceCube Collaboration), Phys. Rev. D **97** 072009 (2018); hep-ex/1709.07079.

Neutrino interferometry for high-precision tests of Lorentz symmetry with IceCube (IceCube Collaboration), Nature Physics **14** 961(2018); hep-ex/1709.03434.

Refereed Publications & arXiv Papers

Measurement of atmospheric neutrino oscillations at 6-56 GeV with IceCube DeepCore (IceCube Collaboration), Phys. Rev. Lett. **120** 071801 (2018); astro-ph.HE/1707.07081.

Constraints on Galactic neutrino emission with 7 years of IceCube data (IceCube Collaboration), Astrophys. J. **849** 67 (2017); astro-ph.HE/1707.03416.

Identification of gamma-rays and neutrinos from the Cygnus-X complex considering radio gamma correlation (with Mehmet Gündüz et al.); astro-ph.HE/1705.08337.

Search for neutrinos from dark matter self-annihilations in the center of the Milky Way with 3 years of IceCube/DeepCore (IceCube Collaboration), Eur. Phys. Jour. C **77** 9 627 (2017); hep-ex/1705.08103.

Measurement of the ν_μ energy spectrum with IceCube-79 (IceCube Collaboration), Eur. Phys. J. C **77** 10 692 (2017); astro-ph.HE/1705.07780.

Search for astrophysical sources of neutrinos using cascade events in IceCube (IceCube Collaboration), Astrophys. J. **846** 2 136 (2017); astro-ph.HE/1705.02383.

Search for high-energy neutrinos from Gravitational Wave Event GW151226 and Candidate LVT151012 with ANTARES and IceCube (ANTARES, IceCube, LIGO Scientific and Virgo collaborations), Phys. Rev. D **96** 022005 (2017); astro-ph.HE/1703.06298.

IceCube: Neutrinos and multimessenger astronomy (with M. Ahlers), Progress of Theoretical and Experimental Physics **12** 12A105 (2017).

Gamma-ray puzzle in Cygnus X: Implications for high-energy neutrinos (with T. Yoast-Hull et al.), Phys. Rev. D **96** 4 043011 (2017); astro-ph.HE/1703.02590.

Extending the search for muon neutrinos coincident with gamma-ray bursts in IceCube data (IceCube Collaboration), Astrophys. J. **843** 112 (2017); astro-ph.HE/1702.06868.

Multiwavelength follow-up of a rare IceCube neutrino multiplet (IceCube Collaboration, ASAS-SN, The Astrophysical Multimessenger Observatory Network, Fermi, HAWC, LCO, MASTER, Swift and VERITAS collaborations), Astronomy and Astrophysics **850** L35 (2017); astro-ph.HE/1702.06131.

Search for sterile-neutrino mixing using 3 years of IceCube / DeepCore data (IceCube Collaboration), Phys. Rev. D **95** 112002 (2017); hep-ex/1702.05160.

IceCube in the era of multimessenger astrophysics, Mod. Phys. Lett. A **32** 2 1730010 (2017).

Astrophysical neutrinos and cosmic rays observed by IceCube (IceCube Collaboration), Advances in Space Research **62** 2902 (2018); astro-ph.HE/1701.03731.

The IceCube Realtime Alert System (IceCube Collaboration), Astropart. Phys. **92** 30 (2017); astro-ph.HE/1612.06028.

Search for annihilating dark matter in the Sun with 3 years of IceCube data (IceCube Collaboration), Eur. Phys. J. C **77** 3 146 (2017); astro-ph.HE/1612.05949/ erratum 2019.

Refereed Publications & arXiv Papers

The IceCube Neutrino Observatory: Instrumentation and Online Systems (IceCube Collaboration), JINST 12 (2017) 03, P03012, JINST 19 (2024) 05, E05001 (erratum); astro-ph.IM/1612.05093.

The contribution of Fermi-2LAC blazars to the diffuse TeV-PeV neutrino flux (IceCube Collaboration), Astrophys. J. **835** 1 45 (2017); astro-ph.HE/1611.03874.

Very–high-energy gamma-ray follow-up program using neutrino triggers from IceCube (IceCube, MAGIC and VERITAS collaborations), J. Inst. **11** P11009 (2016); hep-ex/1610.01814.

All-sky search for time-integrated neutrino emission from astrophysical sources with 7 years of IceCube data, Astrophys. J. **835** 2 151 (2017); astro-ph.HE/1609.04981.

Prospects for detecting Galactic sources of cosmic neutrinos with IceCube: An update (with A. Kheirandish and V. Niro, Astropart. Phys. **86** 46 (2017); astro-ph.HE/1609.03072.

First search for dark-matter annihilations in the Earth with the IceCube Detector (IceCube Collaboration), Eur. Phys. J. C **77** 2 82 (2017); astro-ph.HE/1609.01492.

Observation and characterization of a cosmic-muon neutrino flux from the Northern Hemisphere using six years of IceCube data (IceCube Collaboration), Astrophys. J. **833** 3; astro-ph.HE/1607.08006.

Constraints on ultra–high-energy cosmic-ray sources from a search for neutrinos above 10 PeV with IceCube (IceCube Collaboration), Phys. Rev. Let. **117** 241101 (2016); hep-ex/ 1607.05886.

Search for sources of high-energy neutrons with four years of data from the IceTop Detector (IceCube Collaboration), Astrophys. J. **830** 129 (2016); astro-ph.HE/1607.05614.

PINGU: A vision for neutrino and particle physics at the South Pole (The IceCube-Gen2 collaboration), J. Phys. G **44** 054006 (2017); hep-ex/1607.02671.

Neutrino oscillation studies with IceCube / DeepCore (IceCube Collaboration), Nucl. Phys. B **908** 161 (2016).

All-flavour search for neutrinos from dark-matter annihilations in the Milky Way with IceCube/ DeepCore (IceCube Collaboration), Eur Phys. J. C **76** 531; astro-ph.HE/1606.00209.

High-energy neutrinos from recent blazar flares (with A. Kheirandish), Astrophys. J. **831** 1 12 (2016); astro-ph.HE/1605.06119.

Searches for sterile neutrinos with the IceCube Detector (IceCube Collaboration), Phys. Rev. Lett. **117** 071801 (2016); hep-ex/1605.01990.

IceCube seeks to expand (with Spencer Klein), CERN Courier **56** 6 40 (2016).

Charm contribution to the atmospheric neutrino flux (with L. Wille), Phys. Rev. D **94** 1 014014 (2016); hep-ex/1605.01409.

The slope, curvature, and higher parameters in *pp* and $\bar{p}p$ scattering, and the extrapolation of measurements of $d\sigma(s, t) / dt$ to $t = 0$ (with M.M. Block, *et al*), Phys. Rev. D **93** 11 114009 (2016); hep-ph/1605.00152.

Lowering IceCube's energy threshold for point-source searches in the Southern sky (IceCube Collaboration), Astrophys. J. L. **824** L28 (2016) ; astro-ph.HE/1605.00163v2.

Comment on "More on Heisenberg's model for high-energy nucleon-nucleon scattering", (with M.M. Block, *et al*), Phys. Rev. D 7 **93** 078501 (2016) ; hep-ph/1604.01832.

Anisotropy in cosmic-ray arrival directions in the Southern Hemisphere with six years of data from the IceCube Detector (IceCube Collaboration), Astrophys. J. **826** 220 (2016); astro-ph.HE/1603.01227v2.

High-energy neutrino follow-up search of gravitational wave event GW150914 with ANTARES and IceCube (ANTARES, IceCube, LIGO Scientific and Virgo collaborations), Phys. Rev. D **93** 122010 (2016); astro-ph.HE/1602.05411.

An all-sky search for three flavors of neutrinos from gamma-ray bursts with the IceCube Neutrino Observatory (IceCube Collaboration), Astrophys. J. L. **824** L28 (2016); astro-ph.HE/ 1601.06484.

Upper limit on forward charm contribution to atmospheric neutrino flux (with L. Wille); arXiv:1601.03044.

Improved limits on dark-matter annihilation in the Sun with the 79-string IceCube Detector and implications for supersymmetry (IceCube Collaboration), J. Cosmo. & Astro. Phys. **04** 022 (2016); hep-ph/1601.00653v2.

Search for correlations between the arrival directions of IceCube neutrino events and ultra–high-energy cosmic rays detected by the Pierre Auger Observatory and the Telescope Array (IceCube, Auger and Telescope Array collaborations), J. Cosmo. & Astro. Phys. **01** 037 (2016); astro-ph.HE/1511.09408v2.

First combined search for neutrino point-sources in the Southern Hemisphere with the ANTARES and IceCube neutrino telescopes (ANTARES and IceCube collaborations), Astrophys. J. **823** 65 (2016); hep-ex/1511.02149.

Searches for relativistic magnetic monopoles in IceCube (IceCube Collaboration), Eur. Phys. J. C **76** 133 (2016); astro-ph.HE/1511.01350.

Search for astrophysical tau neutrinos in 3 years of IceCube data (IceCube Collaboration), Phys. Rev. D **93** 022001(2016); astro-ph.HE/1509.06212.

Search for transient astrophysical neutrino emission with IceCube-DeepCore (IceCube Collaboration), Astrophys. J. **816** 75 (2016); astro-ph.HE/1509.05029.

Measurement of muon annual modulation and muon-induced phosphorescence in NaI(Tl) crystals with DM-Ice17 (DM-Ice collaboration), Phys. Rev. D **93** 042001 (2016); DOI: 10.1103/PhysRevD.93.042001.

A combined maximum-likelihood analysis of the high-energy astrophysical neutrino flux measured with IceCube (IceCube Collaboration), Astrophys. J. **809** 1 98 (2015); astro-ph. HE/1507.03991.

Evidence for astrophysical muon neutrinos from the Northern sky with IceCube (IceCube Collaboration), Phys. Rev. Lett. **115** 8 081102 (2015); astro-ph.HE/1507.04005.

Characterization of the atmospheric muon flux in IceCube (IceCube Collaboration), Astropart. Phys. **78** 1 (2016); astro-ph.HE/1506.07981v2.

Comprehensive fits to high energy data for σ, ρ, and β and the asymptotic black-disk limit (with M.M. Block, *et al*), Phys. Rev. D **92** 114021 (2015); DOI: 10.1103/PhysRevD.92.114021.

Detection of a Type IIn supernova in optical follow-up observations of IceCube neutrino events (IceCube, Swift, and PTF collaborations and Pan-STARRS Science Consortium), Astrophys. J. **811** 52 (2015); astro-ph.HE/1506.03115.

Search for dark matter annihilation in the Galactic Center with IceCube-79 (IceCube Collaboration), Eur. Phys. J. C **75** 492 (2015); astro-ph.HE/1505.07259.

High-energy behavior of photon, neutrino and proton cross sections (with C.A. Arguelles, *et al*), Phys. Rev. D **92** 7 074040 (2015); astro-ph.HE/1504.06639.

Eikonal fit to *pp* and $\overline{p}p$ scattering and the edge in the scattering amplitude (with M.M. Block, *et al*), Phys. Rev. D **92** 1 014030 (2015); astro-ph.HE/1505.04842.

Measurement of the atmospheric ν_e spectrum with IceCube (IceCube Collaboration), Phys. Rev. D **91** 122004 (2015); astro-ph.HE/1504.03753.

The Intermediate Neutrino Program (with C. Adams, *et al*); hep-ex/1503.06637v2.

Searches for time-dependent neutrino sources with IceCube data from 2008 to 2012 (IceCube Collaboration), Astrophys. J. **807** 46 (2015); astro-ph.HE/1503.00598.

Flavor ratio of astrophysical neutrinos above 35 TeV in IceCube (IceCube Collaboration), Phys. Rev. Lett. **114** 171102 (2015); astro-ph.HE/1502.03376.

IceCube-Gen2: A vision for the future of neutrino astronomy in Antarctica (IceCube-Gen2 collaboration); astro-ph.HE/1412.5106v2.

Cosmic neutrinos and more: IceCube's first 3 years (with Spencer Klein), CERN Courier **54** 10 30 (2014); cerncourier.com/cws/article/cern/59337.

Search for prompt neutrino emission from gamma-ray bursts with IceCube (IceCube Collaboration), Astrophys. J. Lett. **805** L5 (2015); astro-ph.HE/1412.6510.

Determining neutrino oscillation parameters from atmospheric muon neutrino disappearance with 3 years of IceCube DeepCore data (IceCube Collaboration), Phys. Rev. D **91** 072004 (2015); hep-ex/1410.7227.

Atmospheric and astrophysical neutrinos above 1 TeV interacting in IceCube (IceCube Collaboration), Phys. Rev. D **91** 022001 (2015); astro-ph.HE/1410.1749.

Development of a general analysis and unfolding scheme and its application to measure the energy spectrum of atmospheric neutrinos with IceCube (IceCube Collaboration), Eur. Phys. J. C **75** 116 (2015); astro-ph.HE/1409.4535.

Evidence for a constant “edge” in proton-proton scattering at very high energies (with Block *et al*), Phys. Rev. D **91** 011501(R) (2015); DOI: 10.1103/PhysRevD.91.011501.

High-energy cosmic neutrino puzzle: a review (with Markus Ahlers), Reports on Progress in Physics **78** 12 12690 (2015).

Searches for small-scale anisotropies from neutrino point sources with 3 years of IceCube data (IceCube Collaboration), Astropart. Phys. **66** 39 (2015); astro-ph.HE/1408.0634.

Multimessenger search for sources of gravitational waves and high-energy neutrinos: Results for initial LIGO-Virgo and IceCube (IceCube, LIGO and Virgo collaborations), Phys. Rev. D **90** 102002 (2014); astro-ph.HE/1407.1042.

Multipole analysis of IceCube data to search for dark matter accumulated in the Galactic Halo (IceCube Collaboration), Eur. Phys. J. C **75** 20 (2015); astro-ph.HE/1406.6868.

Searches for extended and point-like neutrino sources with 4 years of IceCube data (IceCube Collaboration), Astrophys. J. **796** 109 (2014); astro-ph.HE/14066757.

Pinpointing extragalactic neutrino sources in light of recent IceCube observations (with Markus Ahlers), Phys.Rev. D **90** (2014) no.4, 043005; astro-ph.HE/1406.2160.

Building for discovery: Strategic plan for U.S. particle physics in the global context (with P5 collaboration); bnl.gov/magnets/docs/pdf/P5MayHEPAP-Ritz.pdf.

High-energy neutrinos from radio galaxies (with J. Tjus, B. Eichmann, *et al*), Phys. Rev. D **89** 123005 (2014); DOI: 10.1103/PhysRevD.89.123005.

IceCube (with Tom Gaisser), Annual Review of Nuclear and Particle Science **64** 101 (2014).

Observation of high-energy astrophysical neutrinos in 3 years of IceCube data (IceCube Collaboration), Phys. Rev. Lett. **113** 101101 (2014); astro-ph.HE/1405.5303.

Search for non-relativistic magnetic monopoles with IceCube (IceCube Collaboration), Euro. Phys. J. C **74** 2938 (2014); astro-ph.CO/1402.3460.

Letter of Intent: The Precision IceCube Next Generation Upgrade (PINGU) (IceCube-PINGU collaboration); physics.ins-det/1401.2046.

Search for neutrino-induced particle showers with IceCube-40 (IceCube Collaboration), Phys. Rev. D **89** 102001 (2014); astro-ph.HE/1312.0104.

Refereed Publications & arXiv Papers

Search for a diffuse flux of astrophysical muon neutrinos with the IceCube 59-string configuration (IceCube Collaboration), Phys. Rev. D **89** 062007 (2014); astro-ph.HE/ 1311.7048.

The IceProd framework: Distributed data processing for the IceCube Neutrino Observatory (IceCube Collaboration), J of Parallel & Dist Computing **75** 198 (2015); cs.DC/1311.5904.

Evidence for high-energy extraterrestrial neutrinos at the IceCube Detector (IceCube Collaboration, Science **342** 1242856 (2013); astro-ph.HE/1311.5238v1.

Observing high-energy neutrinos with IceCube, Intl. Society for Optics and Photonics (SPIE) Newsroom, spie.org/x104832.xml; DOI:10.1117/2.1201311.005000 (2013).

Energy reconstruction methods in the IceCube Neutrino Telescope (IceCube Collaboration), J. of Instrumentation **9** P03009 (2014); physics.ins-det/1311.4767.

Reevaluation of the prospect of observing neutrinos from Galactic sources in the light of recent results in gamma-ray and neutrino astronomy (with M.C. González-García and V. Niro), Astropart. Phys. **57** 39 (2014); astro-ph.HE/1310.7194.

Probing the origin of cosmic rays with extremely high-energy neutrinos using the IceCube Observatory (IceCube Collaboration), Phys. Rev. D **88** 112008 (2013); astro-ph.HE/ 1310.5477.

Improvement in fast particle-track reconstruction with robust statistics (IceCube Collaboration), Nucl. Instrum. and Meth. A **736** 143 (2014); astro-ph.IM/1308.5501.

Search for time-independent neutrino emission from astrophysical sources with 3 years of IceCube data (IceCube Collaboration), Astrophys. J. **779** 132 (2013); astro-ph.HE/1307.6669.

An IceCube search for dark-matter annihilation in nearby galaxies and galaxy clusters (IceCube Collaboration), Phys. Rev. D **88** 122001 (2013); astro-ph.HE/1307.3473.

Observation of the cosmic-ray shadow of the Moon with IceCube (IceCube Collaboration), Phys. Rev. D **89** 102004 (2014); astro-ph.HE/1305.6811.

Measurement of atmospheric neutrino oscillations with IceCube (IceCube Collaboration), Phys. Rev. Lett **111** 081801 (2013); hep-ex/1305.3909.

Neutrino astronomy: An update, Frontiers of Physics **8** 6 771 (2013), also Astropart. Phys. **53** 166 (2014).

Charge asymmetry of weak boson production at the LHC and the charm content of the proton(with Y.S. Jeong & C.S. Kim), Phys. Rev. D **88** 021103 (2013); hep-ph/1304.0322.

South Pole glacial climate reconstruction from multi-borehole laser particulate stratigraphy (IceCube Collaboration), J. Glaciol. **59** 1117 (2013).

First observation of PeV-energy neutrinos with IceCube (IceCube Collaboration), Phys. Rev. Lett. **111** 2 021103 (2013); astro-ph.HE/1304.5356.

Exploring ν_τ - ν_s mixing with cascade events in DeepCore (with Arman Esmaili and O.L.G. Peres), JCAP **1307** 048 (2013); hep-ph/1303.3294.

Limits on the source properties of FR-I galaxies from high-energy neutrino and gamma observations (with I. Saba and J. Becker Tjus), Astropart. Phys. **48** 30 (2013); astro-ph.HE/1302.1015.

Measurement of the cosmic ray energy spectrum with IceTop-73 (IceCube Collaboration), Phys. Rev. D **88** 042004 (2013); astro-ph.HE/1307.3795.

Measurement of South Pole ice transparency with the IceCube LED calibration system (IceCube Collaboration), Nucl. Inst. & Meth. A **711** 73 (2013); astro-ph.IM/1301.5361.

Neutrino astronomy: An update, Riv. Nuovo Cim. **036** 03 81 (2013).

Measurement of the atmospheric ν_e flux in IceCube (IceCube Collaboration), Phys. Rev. Lett. **110** 151105 (2013); hep-ex/1212.4760.

Search for dark matter annihilations in the Sun with the 79-string IceCube Detector (IceCube collaboration), Phys. Rev. Lett. **110** 131302 (2013); astro-ph/HE/1212.4097v1.

Search for Galactic PeV gamma rays with the IceCube Neutrino Observatory (IceCube collaboration), Phys. Rev. D **87** 062002 (2013); astro-ph.HE/1210.7992.

Observation of cosmic-ray anisotropy with the IceTop Air Shower Array (IceCube Collaboration), Astrophys. J. **765** 55 (2013); astro-ph/HE/1210.5278.

Pionic photons and neutrinos from cosmic-ray accelerators, Astropart. Phys. **43** 155 (2013).

The era of kilometer-scale neutrino detectors (with Uli Katz), Adv.High Energy Phys. **2013** (2013) 680584; DOI: 10.1155/2013/680584.

Search for neutrinos from annihilating dark matter in the direction of the Galactic Center with the 40-string IceCube Neutrino Observatory (IceCube Collaboration); hep-ex/1210.3557v3 (2013).

Searches for high-energy neutrino emission in the Galaxy with the combined IceCube-AMANDA Detector (IceCube Collaboration), Astrophys. J. **763** 33 (2013); astro-ph.HE/ 1210.3273.

Commentary on “Total Hadronic Cross Section Data and the Froissart-Martin Bound,” by Fagundes, Menon and Silva, with M.M. Block; Braz. J. Phys. **42** 465 (2012); hep-ph/ 1210.3008.

An improved method for measuring muon energy using the truncated mean of dE/dx (IceCube Collaboration), Nucl. Instrum. & Meth. A **703** 190 (2013); physics.data-an/1208.3430.

IceTop: The surface component of IceCube (IceCube Collaboration), Nucl. Instrum. & Meth. A **700** 188 (2013); astro-ph.IM/1207.6326v2.

Search for relativistic magnetic monopoles with IceCube (IceCube Collaboration), Phys. Rev. D **87** 022001 (2013); astro-ph.HE/1208.4861.

Minimal cosmogenic neutrinos (with Markus Ahlers), Phys. Rev. D **86** 083010 (2012); astro-ph.HE/1208.4181.

New experimental evidence that the proton develops asymptotically into a black disk (with M.M. Block), Phys. Rev. D **86** 051504 (2012); hep-ph/1208.4086.

Lateral distribution of muons in IceCube cosmic-ray events (IceCube Collaboration), Phys. Rev. D **87** 012005 (2013); astro-ph.HE/1208.2979v1.

Cosmic-ray composition and energy spectrum from 1 to 30 PeV using the 40-string configuration of IceTop and IceCube (IceCube Collaboration), Astropart. Phys. **42** 15 (2013); astro-ph.HE/1207.3455.

Use of event-level neutrino telescope data in global fits for theories of new physics (P. Scott et al with the IceCube Collaboration), JCAP **11** 057 (2012); hep-ph/1207.0810.

Constraining sterile neutrinos with AMANDA and IceCube atmospheric neutrino data (with A. Esmaili and O.L.G. Peres), JCAP **11** 041 (2012); hep-ph/1206.6903.

Forward hadronic scattering at 8 TeV; Predictions for the LHC (with M.M. Block), Phys. Rev. D **86** 014006 (2012); hep-ph/1205.5514.

An absence of neutrinos associated with cosmic-ray acceleration in gamma-ray bursts (IceCube Collaboration), Nature **484** 351 (2012); astro-ph.HE/1204.4219.

Light sterile neutrinos: A white paper (with K.N. Abazajian *et al*); hep-ph/1204.5379.

All-particle cosmic-ray energy spectrum measured with 26 IceTop stations (IceCube Collaboration), Astropart. Phys. **44** 40 (2013); astro-ph.HE/1202.3039.

Search for UHE tau neutrinos with IceCube (IceCube Collaboration), Phys. Rev. D **86** 022005 (2012); astro-ph.HE/1202.4564.

Multimessenger astronomy with gravitational waves and high-energy neutrinos (with S. Ando *et al*), Reviews of Modern Physics **85** 1401 (2013); DOI: 10.1103/RevModPhys.85.1401.

“Soft” hadronic cross-sections challenge hidden dimensions (with M.M. Block); hep-ph/1201.0960.

Multi-year search for dark-matter annihilations in the Sun with the AMANDA-II and IceCube detectors (IceCube Collaboration) Phys. Rev. D **85** 042002 (2012); astro-ph.HE/ 1112.1840v2.

Total hadronic cross sections and $\pi^{\mp}\pi^{+}\pi$ scattering (with Keigi Igi *et al),* Phys. Rev. D **85** 074020 (2012); RIKEN-MP-27, hep-ph/1110.1479.

The design and performance of IceCube DeepCore (IceCube Collaboration), Astropart. Phys. **35** 615 (2012); astro-ph.IM/1109.6096.

Searching for soft relativistic jets in core-collapse supernovae with the IceCube optical follow-up program (IceCube & ROTSE collaborations) Astron. & Astrophys. **539** A 60 (2012); astro-ph.HE/1111.7030.

Experimental confirmation that the proton is asymptotically a black disk (with M.M. Block), Phys. Rev. Lett. **107** 212002 (2011); astro-hep/1109.2041.

Observation of anisotropy in the Galactic cosmic-ray arrival directions at 400 TeV with IceCube (IceCube Collaboration), Astrophys. J. **746** 33 (2012); astro-ph.HE/1109.1017.

IceCube sensitivity for low-energy neutrinos from nearby supernovae (IceCube Collaboration), Astron. & Astrophys. **535** A 109 (2011), corrigendum A&A **563** C1 (2014); astro-ph.HE/1108.0171.

Searches for periodic neutrino emission from binary systems with 22 and 40 strings of IceCube (IceCube Collaboration), Astrophys. J. **748** 118 (2012); astro-ph.HE/1108.3023.

Neutrino analysis of the 2010 September Crab Nebula flare and time-integrated constraints on neutrino emission from the Crab using IceCube (IceCube Collaboration), Astrophys. J. **745** 45 (2012); astro-ph.HE/11063484.

A search for the dark-matter annual modulation in South Pole ice (with J. Cherwinka et al), Astropart. Phys. **35** 749 (2012); astro-ph.HE/1106.1156.

GRBs on probation: Testing the UHE CR paradigm with IceCube, with M. Ahlers and M.C. González-García, Astropart. Phys. **35** 87 (2011); astro-ph.HE/1103.3421.

Forward hadronic scattering at 7 TeV: Predictions for the LHC: An update, with M.M. Block, Phys. Rev. D **83** 077901 (2011); hep-ph/1102.3163.

Constraints on the extremely–high-energy cosmic neutrino flux with the IceCube 2008-2009 data (IceCube Collaboration), Phys. Rev. D **83** 092003 (2011), Erratum *ibid*. D **84** 079902; astro-ph.CO/1103.4250.

Observation of anisotropy in the arrival directions of Galactic cosmic rays at multiple angular scales with IceCube (IceCube Collaboration), Astrophys. J. **740** 16 (2011); astro-ph.HE/ 1105.2326.

Search for a diffuse flux of astrophysical muon neutrinos with the IceCube 40-string detector (IceCube Collaboration), Phys. Rev. D **84** 082001 (2011); astro-ph.HE/1104.5187.

Time-dependent searches for point sources of neutrinos with the 40-string and 22-string configurations of IceCube (IceCube Collaboration), Astrophys. J. **744** 1 (2012); astro-ph.HE/1104.0075.

Background studies for acoustic neutrino detection at the South Pole (IceCube Collaboration), Astropart. Phys. **35** 312 (2011); astro-ph.IM/1103.1216.

Search for dark matter from the Galactic halo with the IceCube neutrino telescope (IceCube Collaboration), Phys. Rev. D **84** 02204 (2011); astro-ph.HE/1101.3349.

IceCube neutrino observatory, McGraw-Hill Yearbook of Science & Technology 2011, 148.

Neutrino astronomy, McGraw-Hill Encyclopedia of Science & Technology (2011).

First search for atmospheric and extraterrestrial neutrino-induced cascades with the IceCube detector (IceCube Collaboration), Phys. Rev. D **84** 072001; astro-ph.HE/1101.1692.

Limits on neutrino emission from gamma-ray bursts with the 40-string IceCube detector (IceCube Collaboration), Phys. Rev. Lett. **106** 141101 (2011); astro-ph.HE/1101.1448.

Time-integrated searches for point-like sources of neutrinos with the 40-string IceCube detector (IceCube Collaboration), Astrophys. J. **732** 18 (2011); astro-ph.HE/1012.2137.

Constraints on high-energy neutrino emission from SN 2008D (IceCube Collaboration), Astron. and Astrophys. **527** A28 (2011); astro-ph.HE/1101.3942.

Search for a Lorentz-violating sidereal signal with atmospheric neutrinos in IceCube (IceCube Collaboration), Phys. Rev. D **82** 112003 (2010), Phys. Rev. D 113 (2026) 1, 019901 (erratum); astro-ph.HE/1010.4096.

Measurement of the atmospheric neutrino energy spectrum from 100 GeV to 400 TeV with IceCube (IceCube Collaboration), Phys. Rev. D **83** 012001 (2011); astro-ph.HE/1010.3980.

Search for neutrino-induced cascades with five years of AMANDA data (IceCube Collaboration), Astropart. Phys. **34** 420 (2011).

Measurement of acoustic attenuation in South Pole ice (IceCube Collaboration), Astropart. Phys. **34** 382 (2011); astro-ph.IM/1004.1694.

The first search for extremely high-energy cosmogenic neutrinos with the IceCube neutrino observatory (IceCube Collaboration), Phys. Rev. D **82** 072003 (2010); astro-ph.CO/ 1009.1442.

IceCube: An instrument for neutrino astronomy (with S. Klein), invited review article, Rev. of Sci. Instrum. **81** 081101 (2010); astro-ph.HE/1007.1247.

Detection of supernova explosions with IceCube (with J.P. Rodrigues), Class. Quant. Grav. **27** 194003 (2010).

GZK neutrinos after the Fermi-LAT diffuse photon flux measurement (with M. Ahlers *et al*), Astropart. Phys. **34** 106 (2010); astro-ph.HE/1005.2620.

Measurement of the anisotropy of cosmic-ray arrival directions with IceCube (IceCube Collaboration), Astrophys. J. Lett. **718** L194 (2010); astro-ph.HE/1005.2960v1.

Search for relativistic magnetic monopoles with the AMANDA-II Neutrino Telescope (IceCube Collaboration), Euro. Phys. J. C **69** 3 361(2010).

Search for relativistic magnetic monopoles with the AMANDA-II Neutrino Telescope (IceCube Collaboration), Euro. Phys. J. C **69** 361 (2010).

Refereed Publications & arXiv Papers

The energy spectrum of atmospheric neutrinos between 2 and 200 TeV with the AMANDA-II detector (IceCube Collaboration), Astropart. Phys. **34** 48 (2010); astro-ph.HE/1004.2357.

Limits on a muon flux from Kaluza-Klein dark-matter annihilations in the Sun from the IceCube 22-string detector (IceCube Collaboration), Phys. Rev. D **81** 057101 (2010); astro-ph.CO/0910.4480.

Neutrino emission from high-energy component gamma-ray bursts (with J.K. Becker *et al*), Astrophys, J. **721** 2 1891 (2010); DOI: 10.1088/0004-637X/721/2/1891.

Measurement of sound speed vs. depth in South Pole ice for neutrino astronomy (IceCube Collaboration), Astropart. Phys. **33** 277 (2010); astro-ph.IM/0909.2629v1.

High-energy neutrinos from WIMP annihilations in the Sun (with D. Hooper), Particle Dark Matter, p. 507, Cambridge University Press, *ed. by* G. Bertone (2010).

Calibration and characterization of the IceCube photomultiplier tube (IceCube Collaboration), Nucl. Inst. and Meth. A **618** 139 (2010); astro-ph.IM/1002.2442v1.

Gamma-ray astronomy with muons: Sensitivity of IceCube to PeVatrons in the Southern sky (with A. Kappes and A. O Murchadha), Phys. Rev. D **80** 083009 (2009); astro-ph.he/ 0909.3836.

Extending the search for neutrino point sources with IceCube above the horizon (IceCube Collaboration), Phys. Rev. Lett. **103** 221102 (2009); astro-ph.HE/0911.2338.

IceCube: The rationale for kilometer-scale neutrino detectors; astro-ph.HE/0910.0436.

Reconstructing the supernova bounce time with neutrinos in IceCube (with G.G. Raffelt), MPP-2009-152, Phys. Rev. D **80** 087301 (2009); astro-ph.HE/0908.2317.

Search for muon neutrinos from gamma-ray bursts with the IceCube neutrino telescope (IceCube Collaboration), Astrophys. J. **710** 346 (2010); astro-ph.HE/0907.2227.

Lessons in particle physics (with L. Anchordoqui) (2009); physics.ed-ph/0906.1271.

The indirect search for dark matter with IceCube (with D. Hooper), New J. Phys. **11** 105019 (2009); astro-ph.HE/0910.4513.

First neutrino point-source results from the 22-string IceCube detector (IceCube Collaboration), Astrophys. J. Lett. **701** L47 (2009); astro-ph.HE/0905.2253.

Search for high-energy muon neutrinos from the “naked-eye” GRB 080319B with the IceCube Neutrino Telescope (IceCube Collaboration), Astrophys. J. **701** 1721(2009), erratum *ibid* **708** 911 (2010); astro-ph.HE/0902.0131.

Determination of the atmospheric neutrino flux and searches for new physics with AMANDA-II (IceCube Collaboration), Phys. Rev. D **79** 102005 (2009); astro-ph.HE/0902.0675.

Identifying galactic PeVatrons with neutrinos (with M.C. González-García and S. Mohapatra), Astropart. Phys. **31** 6 437 (2009); astro-ph.HE/0902.1176.

Limits on a muon flux from neutralino annihilations in the Sun with the IceCube 22-string detector (IceCube Collaboration), Phys. Rev. Lett. **102** 201302 (2009); astro-ph.CO/ 0902.2460.

Multi-messenger astronomy with GRBs: A White Paper for the Astro2010 Decadal Survey (with M. Stamatikos et *al*.) (2009); astro-ph.HE/0902.3022.

Particle acceleration in stellar remnants: A White Paper for the Astro2010 Decadal Survey (with P. Kaaret et *al*.) (2009).

Section on supernova remnants and cosmic rays of the APS White Paper on the Status and future of ground-based gamma-ray astronomy (with M. Pohl et *al*) (2008); astro-ph/ 0810.0673.

The IceCube Data Acquisition System: Signal capture, digitization, and timestamping (IceCube Collaboration), Nucl. Instrum. and Methods A **601** 294 (2009); physics.ins-det/0810.4930.

Solar energetic particle spectrum on 13 December 2006 determined by IceTop (IceCube Collaboration), Astrophys. J. Lett. **689** L65-L68 (2008); astro-ph/0810.2034.

Closing in on the sources of galactic and extragalactic cosmic rays (2008); astro-ph/0809.1874.

Search for point sources of high-energy neutrinos with final data from AMANDA-II (IceCube Collaboration), Phys. Rev. D **79** 062001 (2009); astro-ph/0809.1646.

Astronomy and astrophysics with neutrinos (with S. Klein), Phys. Today **61** N5 29 (2008).

Prospects for identifying the sources of the galactic cosmic rays with IceCube (with A. Kappes and A. O Murchadha), Nucl. Instrum. Meth. A **602** 117 (2009); also Phys. Rev. D **78** 063004 (2008); astro-ph/0803.0314v2.

Radiography of the Earth's core and mantle with atmospheric neutrinos (with M.C. González-García et *al*.), Phys. Rev. Lett. **100** 6 061802 (2008); hep-ph/ 0711.0745.

Search for ultra–high-energy neutrinos with AMANDA-II (IceCube Collaboration), Astrophys. J. **675** 2 1014 (2008); astro-ph/0711.3022.

LSI +61 303 as a potential neutrino source on the light of MAGIC results (with D.F. Torres), Astropart. Phys. **27** 500-508 (2008); astro-ph/0607368.

Neutrinos from cosmic-ray accelerators in the Cygnus region of the galaxy (with A. O'Murchadha), Phys. Rev. D **76** 123003; astro-ph/0705.1723.

Multiyear search for a diffuse flux of muon neutrinos with AMANDA-II (IceCube Collaboration), Phys. Rev. D **76** 042008; erratum *ibid* **77** 089904 (E); astro-ph/0705.1315.

Neutrino flux from cosmic-ray accelerators in the Cygnus Spiral Arm of the Galaxy (with L. Anchordoqui *et al*.) Phys. Rev. D **76** 067301 (2007); astro-ph/0612699.

The search for muon neutrinos from Northern Hemisphere gamma-ray bursts with the Antarctic Muon and Neutrino Detector Array (AMANDA) (IceCube and IPN collaborations), Astrophys. J. **674** 357 (2008); astro-ph/0705.1186.

Detection of atmospheric muon neutrinos with the IceCube 9-string detector (IceCube Collaboration), Phys. Rev. D **76** 027101 (2007); astro-ph/0705.1781.

Neutrino astrophysics experiments beneath the sea and ice, Science **315** 66 (2007).

Search for neutrino-induced cascades from gamma-ray bursts with AMANDA (IceCube Collaboration), Astrophys. Jour. **664** 397 (2007); astro-ph/0702265.

Five years of searches for point sources of astrophysical neutrinos with the AMANDA-II neutrino telescope (IceCube Collaboration), Phys. Rev. D **75** 102001 (2007); astro-ph/0611063.

Gamma-ray-burst neutrinos probing quantum gravity (with M.C. González-García), Jour. Cosmo. Astropart. Phys. **0702** 008 (2007); hep-ph/0611359.

Implications from analyticity constraints used in a Landshoff-Donnachie fit (with M.M. Block), Phys. Rev. D **74** 117501 (2006); hep-ph/0605216.

Probing leptoquark production at IceCube (with L. Anchordoqui *et al*.), Phys. Rev. D **74** 125021 (2006); hep-ph/0609214.

Introduction to the SalSA, a saltdome shower array as a GZK neutrino observatory (with D. Saltzberg *et al*.), Int. J. Mod. Phys. A **21** S1 252 (2006).

AMANDA observations constrain the ultra-high energy neutrino flux (with D. Hooper), Phys. Rev. Lett. **97** 099901 (2006); astro-ph/0605103.

IceHEP: High-energy physics at the South Pole (with L. Anchordoqui), Annals of Physics **321** 2660 (2006); hep-ph/0510389.

Limits on the high-energy gamma and neutrino fluxes from the SGR 1806-20 giant flare of 27 December 2004 with the AMANDA-II detector (IceCube Collaboration), Phys. Rev. Lett. **97** 221101 (2006); astro-ph/0607233.

First-year performance of the IceCube neutrino telescope (IceCube Collaboration), Astropart. Phys. **26** 155 (2006); astro-ph/0604450.

On the selection of AGN neutrino source candidates for a source stacking analysis with neutrino telescopes (IceCube Collaboration), Astropart. Phys. **26** 282 (2006); astro-ph/0609534.

Limits on the muon flux from neutralino annihilations at the center of the Earth with AMANDA (IceCube Collaboration), Astropart. Phys. **26** 126 (2006).

Optical properties of deep glacial ice at the South Pole (AMANDA collaboration), J. Geophys. Res. **111** D13203 DOI:10 1029 / 2005JD006687 (2006).

Astroparticle physics with high-energy neutrinos: from AMANDA to IceCube, Eur. Phys. J. C **46** 669 (2006); astro-ph/0602132.

Prospects for detecting dark matter with nu telescopes in light of recent results from direct detection experiments (with Dan Hooper), Phys. Rev. D **73** 123507 (2006); hep-ph/0510048.

Duality as a robust constraint on the LHC cross section (with M.M. Block), Phys. Rev. D **73** 054022 (2006); hep-ph/0510238.

Limits to the muon flux from neutralino annihilations in the Sun with the AMANDA detector (AMANDA collaboration), Astropart. Phys. **24** 459 (2006); astro-ph/0508518.

The IceCube prototype string in AMANDA (AMANDA collaboration), Nuclear Instruments and Methods A **556** 169 (2006).

Coincident GRB neutrino flux predictions: Implications for experimental UHE neutrino physics (with J.K. Becker, *et al*), Astropart. Phys. **25** 118 (2006); astro-ph/0511785.

Search for extraterrestrial point sources of high-energy neutrinos with AMANDA-II using data collected in 2000-2002 (AMANDA collaboration), Phys. Rev. D **71** 077102 (2005).

TeV photons and neutrinos from giant soft-gamma repeater flares (with H. Landsman and T. Montaruli); astro-ph/0503348.

Flux limits on ultra–high-energy neutrinos with AMANDA-B10, AMANDA collaboration, Astropart. Phys. **22** 339-353 (2005).

A deep high-resolution optical log of dust, ash and stratigraphy in South Pole glacial ice (IceCube Collaboration), Geophys. Res. Lett. **32** L21815 1 (2005).

Probing Planck scale physics with IceCube (with Anchordoqui *et al*.), Phys. Rev. **72** 065019 (2005); hep-ph/0506168.

New evidence for saturation of the Froissart Bound (with M.M. Block), Phys. Rev. D **72** 036006 (2005); hep-ph/0506031.

Neutrinos as a diagnostic of cosmic-ray Galactic-extragalactic transition (with M. Ahlers *et al*.), Phys. Rev. D **72** 023001 (2005); astro-ph/0503229.

Physics reach of high-energy and high-statistics IceCube atmospheric neutrino data (with M.C. González-García and M. Maltoni), Phys. Rev. D **71** 093010 (2005); hep-ph/0502223.

High-energy neutrinos from the TeV Blazar 1ES 1959+650 (with D. Hooper), Astropart. Phys. **32** 537 (2005); astro-ph/0502449.

Neutrinos as a diagnostic of high energy astrophysical processes (with L. Anchordoqui *et al*.), Phys. Lett B **621** 18 (2005); hep-ph/0410003.

The IceCube at the end of the world (with S. Klein), CERN Courier **45** 4 17, also published as a Special Report in the Bulletin of the Assn. of Asia Pacific Phys. Socs. **15** 3 18 (2005).

Uppsala 2005: Leptons, photons, and a lot more, CERN Courier **45** 9 33 (2005).

High-Energy Neutrino Astronomy, in Proc. of Nobel Symposium on Neutrino Physics, Haga Slott, Enköping, Sweden (2004), *ed. by* L. Bergström *et al.*, Physica Scripta T **121** 106 (2005); astro-ph/0501593.

Evidence for the saturation of the Froissart Bound (with M.M. Block), Phys. Rev. D **70** 091901 (2004); hep-ph/0405174.

Neutrino bursts from Fanaroff-Riley I Radio Galaxies (with L. Anchordoqui *et al*.), Phys. Lett. B **600** 202 (2004); astro-ph/0404387.

Search for neutrino-induced cascades with AMANDA (AMANDA collaboration), Astropart. Phys. **22** 127-138 (2004).

Search for extraterrestrial point sources of neutrinos with AMANDA-II (AMANDA collaboration), Phys. Rev. Lett. **92** 071102 (2004).

Measurement of the cosmic-ray composition at the Knee with the SPASE-2/ AMANDA-B10 detectors (AMANDA & SPASE collaborations), Astropart. Phys. **20** 565 (2004).

Calibration and survey of AMANDA with the SPASE detectors (AMANDA & SPASE collaborations), Nucl. Instr. Meth. A **522** 347 (2004).

Muon track reconstruction and data selection techniques in AMANDA (AMANDA collaboration), Nucl. Instr. Meth. A **524** 169 (2004).

Sensitivity of the IceCube detector to astrophysical sources of high-energy muon neutrinos (IceCube Collaboration), Astropart. Phys. **20** 507 (2004).

Galactic point sources of TeV antineutrinos (with L. Anchordoqui *et al*.), Phys. Lett. B **593** 42 (2004); astro-ph/0311002.

GRB941017: A case study of neutrino production in gamma-ray bursts (with D. Hooper and J. Alvarez-Muñiz), Astrophys. J. **604** L85 (2004).

IceCube-Plus: An ultra–high-energy neutrino telescope (with D. Hooper), Jour. of Cosmology & Astropart. Phys. **01** 002 (2004).

Neutrinos from individual gamma-ray bursts in the BATSE catalog (with D. Guetta *et al*.), Astropart. Phys. **20** 429 (2004).

Gamma-ray astronomy with IceCube (with D. Hooper), Jour. of Cosmology & Astropart. Phys. **0308** 006 (2003).

Limits on diffuse fluxes of high-energy extraterrestrial neutrinos with the AMANDA-B10 detector (AMANDA collaboration, J. Ahrens *et al*.), Phys. Rev. Lett. **90** 251101 (2003).

Color evaporation description of inelastic photo-production of J/Ψ at HERA (with O.J.P. Eboli and E.M. Gregores), Phys. Rev. Lett. **90** 251101 (2003).

SUSY in the sky: Observing ultra–high-energy cosmic neutralinos (with C. Barbot *et al*.), Phys. Lett. B **563** 132 (2003).

Refereed Publications & arXiv Papers

Search for point sources of high-energy neutrinos with AMANDA, AMANDA collaboration, Astrophys. J. **583** 1040 (2003).

Neutrinos associated with cosmic rays of top-down origin (with C. Barbot *et al*.), Phys. Lett. B **555** 22 (2003).

Search for neutrino-induced cascades with the AMANDA detector (AMANDA collaboration), Phys. Rev. D **67** 012003 (2003).

Limits to the muon flux from WIMP annihilation in the center of the Earth with the AMANDA detector (AMANDA collaboration), Phys. Rev. D **66** 032006 (2002).

Possible high-energy neutrinos from the cosmic accelerator RX J1713.7-3946 (with J. Alvarez-Muñiz), Astrophys. J. **576** L33 (2002).

High-energy neutrino astronomy: The cosmic ray connection (with D. Hooper), Reports on Progress in Physics **65** 1025 (2002).

Observation of high-energy atmospheric neutrinos with AMANDA (AMANDA collaboration), Phys. Rev. D **66** 012005 (2002).

Results from AMANDA, AMANDA collaboration, Mod. Phys. Letts. A **17** 2019-2037 (2002).

Detecting microscopic black holes with neutrino telescopes (with J. Alvarez-Muñiz *et al*.), Phys. Rev. D **65** 124015 (2002).

Search for supernova neutrino bursts with the AMANDA detector (AMANDA collaboration), Astropart. Phys. **16** 345-359 (2002).

On factorization, quark counting and vector dominance (with M.M. Block and G. Pancheri), Eur. Phys. Jour. C **23** 329 (2002).

A full-acceptance detector at the LHC (FELIX) (with A. Ageev *et al*.), J. Phys. G: Nucl. Phys. **28** R117 (2002).

Phenomenology of high-energy neutrinos in low-scale quantum gravity models (with J. Alvarez-Muñiz *et al*.) Phys. Rev. Lett. **88** 021301 (2002).

The prompt TeV-PeV atmospheric neutrino window (with C.G.S. Costa and C. Salles), Phys. Rev. D **66** 113002 (2002).

Indirect search for neutralino dark matter with high-energy neutrinos (with V. Barger *et al*.), Phys. Rev. D **65** 0705022 (2002).

Observation of high-energy neutrinos using Cerenkov detectors embedded deep in Antarctic ice, AMANDA collaboration, Nature **410** 441 (2001).

Soft color enhancement of the production of J/Ψs by neutrinos (with O.J.P. Eboli and E.M. Gregores), Phys. Rev. D **64** 093015 (2001).

Refereed Publications & arXiv Papers

Survival probability of large rapidity gaps in $\bar{p}p$, pp, γp and $\gamma\gamma$ collisions (with M.M. Block), Phys. Rev. D **63** 114004 (2001).

10^{20} eV cosmic-ray and particle physics with kilometer-scale neutrino telescopes (with J. Alvarez-Muñiz), Phys. Rev. D **63** 037302 (2001).

High-Energy Neutrino Astronomy: Towards Kilometer-Scale Detectors, Current Aspects of Neutrino Physics, *ed. by* D. Caldwell (Springer-Verlag, 2001).

Recent Results from AMANDA (AMANDA collaboration), Intl. J. Mod. Phys. A **16** S1C 1013 (2001).

Icebound Neutrinos, Nuclear Physics News International, **11** 3 30 (2001).

High-Energy Neutrino Astronomy: First Light at the South Pole, Natuur & Techniek **69** 3 22 (2001).

High-energy neutrinos from gamma-ray bursts: Event rates in neutrino telescopes (with J. Alvarez-Muñiz and D.W. Hooper), Phys. Rev. D **62** 093015 (2000).

Extending the frontiers: Reconciling accelerator and cosmic-ray $p\ \bar{p}$ cross sections (with M.M. Block and T. Stanev), Phys. Rev. D **62** 077501 (2000).

High-Energy Neutrino Astronomy: First Light at the South Pole, Mercury Magazine **29** 1 25 (2000).

High-energy neutrino astronomy, in *David Schramm's Universe*, *ed by* G. Brown et *al*, Physics Reports **333** 349 (2000).

The AMANDA neutrino telescope: Principle of operation and first results, AMANDA collaboration, Astropart. Phys. **13** 1 (2000).

Color evaporation-induced rapidity gaps (with O.J.P. Eboli and E.M. Gregores), Phys. Rev. D **61** 034003 (2000).

Predicting proton-air cross sections at $\sqrt{\bar{s}}$ ~30 TeV (with M.M. Block and T. Stanev), Phys. Rev. Lett. **83** 4926 (1999).

Neutrino event rates from gamma-ray bursts (with D. Hooper), Astrophys. J. **527** 93 (1999).

Antarctic dreams, The Sciences **39** 19 (1999), reprinted in *canopus*, the monthly newsletter of the Johannesburg Centre of assa, May and June 2008.

On forward J/Ψ production at Fermilab Tevatron (with O.J.P. Eboli and E.M. Gregores), Phys. Rev. D **60** 117501 (1999).

Muon detection of TeV gamma rays from gamma-ray bursts (with J. Alvarez-Muñiz), Ap. J. **521** 928 (1999).

Inelastic photoproduction at HERA: A second charmonium crisis? (with O.J.P. Eboli and E.M. Gregores), Phys. Lett. B **451** 241 (1999).

Photon-proton and photon-photon scattering from nucleon-nucleon forward-scattering amplitudes (with M.M. Block *et al*.), Phys. Rev. D **60** 054024 (1999).

Are two gluons the QCD pomeron? (with O.J.P. Eboli and E.M. Gregores), Phys. Rev. D **60** 054024 (1999).

The AMANDA neutrino telescope and the indirect search for dark matter, AMANDA collaboration, Physics Reports **307** 243 (1998).

Tau neutrino appearance with a 1000-megaparsec baseline (with D. Saltzberg), Phys. Rev. Lett. **81** 4305 (1998).

Observing the birth of supermassive black holes with the IceCube neutrino detector (with G.M. Fuller and X. Shi), Phys. Rev. Lett. **81** 5722 (1998).

Measurements of the rising photon-photon total cross section at the CERN LEP (with M.M. Block *et al*.), Phys. Rev. D **58** 017503 (1998).

The associated production of weak bosons and jets by multiple parton interactions (with O.J.P. Eboli and K. Mizukoshi), Phys. Rev. D **57** 1730 (1998).

The highest-energy cosmic rays and particle physics (with G. Burdman and R. Gandhi), Phys. Lett. B **417** 107 (1998).

Neutrino fluxes from active galaxies: A model-independent estimate (with E. Zas) Astrophys. Journal **488** 669 (1997).

Optical properties of deep South Pole ice – Absorption, AMANDA collaboration, P. Askebjer et *al*, Applied Optics **36** 4168 (1997).

Optical properties of deep South Pole ice – Scattering, AMANDA collaboration, P. B. Price et *al*, Applied Optics **36** 4181 (1997).

UV and optical light transmission properties in deep ice at the South Pole, AMANDA collaboration, Geophys. Res. Lett. **24** 1355 (1997).

Status of neutrino astronomy: The quest for kilometer-scale instruments, Comments on Nucl. and Part. Phys. **33** 155 (1997).

Prompt charmonium production in *Z* decays (with E.M. Gregores and O.J.P. Eboli), Phys. Lett. B **395** 113 (1997).

Gamma-ray astronomy with muons (with T. Stanev and G.B. Yodh), Phys. Rev. D **55** 4475 (1997).

Quantitative tests of color evaporation: Charmonium production (with J.F. Amundson *et al*.), Phys. Lett. B **390** 323 (1997).

Refereed Publications & arXiv Papers

Neutrino astronomy: The sun and beyond (with J. Bahcall), Phys. World **9** 9 41 (1996).

Ice fishing for neutrinos, Science Spectra **4** 68 (1996).

Signature of γ-ray bursts in neutrino telescopes (with G. Jaczko), Phys. Rev. D **54** 2779 (1996).

Composition of primary cosmic rays beyond the “Knee” from emulsion chamber observations (w/ J. Bellandi, C. Costa & C. Salles), Phys. Rev. D **54** 5558 (1996).

The search for neutrino sources beyond the Sun (with S. Barwick and P.B. Price), International Journal of Modern Physics A **11**19 3393 (1996).

Ultratransparent Antarctic ice as a supernova detector (with J.E. Jacobsen and E. Zas), Phys. Rev. D **53** 7359 (1996).

Optical properties of South Pole ice for neutrino astrophysics (AMANDA collaboration), Antarctic Journal.

AMANDA string quartet: First movements (AMANDA collaboration), Antarctic Journal.

Colorless states in perturbative QCD: Charmonium and rapidity gaps (with J.F. Amundson *et al*.) Phys. Lett. B **372** 127 (1996).

Do gamma-ray explosions produce ultra–high-energy protons?, Phys. World **8** 10 23 (1995).

Particle production in very–high-energy, cosmic-ray emulsion-chamber events: Usual and unusual events (w/C. Costa and C. Salles), Phys. Rev. D **52** 3890 (1995).

Particle astrophysics with high-energy neutrinos (with T.K. Gaisser and T. Stanev), Phys. Reports **258** 173 (1995).

The highest-energy cosmic rays: A paradox, Physics World **8** 29-30 (1995).

Neutrinos from primordial black holes (with B. Keszthelyi and E. Zas), Phys. Rev. D **52** 3239 (1995).

On the age vs. depth and optical clarity of deep ice at the South Pole (AMANDA collaboration), J of Glaciology **41** 445 (1995).

The highest-energy cosmic ray (with T. Stanev *et al*.), Astropart. Phys. **3** 151 (1995).

The elusive neutrino as a window on the Universe, Encyclopedia Britannica Yearbook of Science, 114 (1995).

Antarctic Muon and Neutrino Detector AMANDA: First data and outlook (AMANDA collaboration), Antarctic Journal **29** 337 (1994).

Optical properties of South Pole ice at depths between 0.8 km and 1 km (AMANDA collaboration), Science **267** 1147 (1995).

Signatures of CP violation in the presence of multiple *b*-pair production at hadron colliders (w/ M.C. González-García and R. Vázquez), Phys. Rev. D **51** 4861 (1995).

On the precision of the computation of the QCD corrections to electroweak vacuum polarizations (w/M. González-García and R. Vázquez), Phys. Lett. B **322** 233 (1994).

Possibility that high-energy neutrino telescopes could detect supernovae (with J.E. Jacobsen and E. Zas), Phys. Rev. D **49** 1758 (1994).

Hadronic *W* production and the Gottfried sum rule (with C.S. Kim and M.L. Stong), Phys. Rev. D **49** 3261 (1994).

J/Ψ suppression in electro- and hadroproduction: A conventional physics explanation (with M.A. Doncheski and M.B. Gay Ducati), Phys. Rev. D **49** 1231 (1994).

Empirical determination of the very–high-energy, heavy quark cross section from non-accelerator data (w/M. González-García *et al*.), Phys. Rev. D **49** 2310 (1994).

The charm content of *W* + 1-jet events as a probe of the strange quark distribution function (with U. Baur *et al*.), Phys. Lett B **318** 544 (1993).

Diffraction & the gluon mass (w/M.B. Gay Ducati & A. Natale), Phys. Rev. D **48** 2324 (1993).

Measuring the $\gamma\gamma$ coupling of the Higgs at linear colliders (with O.J.P. Eboli, M.C. González-García and D. Zeppenfeld), Phys. Rev. D **48** 1430 (1993).

Diffuse radiation from cosmic-ray interactions in the galaxy (with V.S. Berezinskii *et al*.), Astropart. Phys. **1** 281 (1993).

Deciphering the quark-gluon structure of the photon in $e\gamma$ collisions (with M.C. González-García *et al*.), Phys. Lett. B **301** 115 (1993).

QCD and minimum-bias physics: The importance of HERA photoproduction measurements (with R.S. Fletcher and T.K. Gaisser), Phys. Lett. B **298** 442 (1993).

High-energy neutrino astronomy: Horizontal air shower arrays vs. underground detectors (with E. Zas and R. Vázquez), Astropart. Phys. **1** 297 (1993).

QCD structure of quarkonium spin spectra (w/C. Olson *et al*.), Phys. Rev. D **47** 3013 (1993).

Relating the pomeron to an effective gluon mass (with G.I. Krein and A. Natale), Phys. Rev. D **47** 3013 (1993).

Threshold effects on heavy quark production in $\gamma\gamma$ interactions (with O.J.P Eboli *et al*.), Phys. Rev. D **47** 1889 (1993).

Two-loop electroweak parameters (with B.A. Kniehl and M.L. Stong), Zeit. für Physik C **58** 119 (1993).

Catching photons from hell, Nature **358** 452 (1992).

Deciphering 40 TeV rapidity gap physics with 2 TeV jet events (with H. Chechime *et al*.), Phys. Lett. B **286** 397 (1992).

Mass of the singlet *P* state (with C. Olson *et al*.), Phys. Lett. B **283** 379 (1992).

Giant horizontal air showers: Implications for AGN neutrino fluxes (with E. Zas), Phys. Lett. B **289** 184 (1992).

Isosinglet neutral heavy lepton production in high-energy e-γ collisions (with M.C. González-García *et al*.), Phys. Lett. B **280** 313 (1992).

Signatures of dark matter in underground detectors (with T. Stelzer and M. Kamionkowski), Phys. Rev. D **45** 4439 (1992).

Oscillating atmospheric neutrinos: ν_μ/μ ratio in surface neutrino telescopes (with M.A. Doncheski and T. Stelzer), Phys. Rev. D **46** 505 (1992).

Two-loop vs. new-physics effects on oblique parameters (with P. Roy and M.L. Stong), Phys. Lett. B **277** 503 (1992).

Heavy quark and prompt lepton production by beamstrahlung in e^+e^- linear colliders (with C.S. Kim and M.L. Stong), Phys. Lett. B **274** 489 (1992).

How large is the total cross section at supercollider energies? (with B. Margolis and M. Block), Phys. Rev. D **45** 839 (1992).

Improving the Cerenkov imaging technique with neural networks (with R. Vázquez and E. Zas), Phys. Rev. D **45** 356 (1992).

Neutrino astronomy on the 1-km^2 scale (with D. Lowder *et al*.), J. Phys. G: Nucl. Part. Phys. **18** 225 (1992).

Electromagnetic pulses from high-energy showers: Implications for neutrino detection (with T. Stanev and E. Zas), Phys. Rev. D **45** 362 (1992).

Re-examining the jet contribution to the photoproduction cross section (with R.S. Fletcher and T.K. Gaisser), Phys. Rev. D **45** 377 (1992).

Observable radiation zeroes in HERA interactions (with M.A. Doncheski), Zeit.. für Physik **52** 673 (1991).

Observation of muons using the Polar Ice Cap as a Cerenkov detector (with D.M. Lowder *et al*.), Nature **353** 331 (1991).

Deciphering the quark-gluon structure of high-energy photons using a tagged photon beam at HERA (with R.S. Fletcher *et al*.), Phys. Lett B **266** 183 (1991).

Radiodetection of cosmic neutrinos: A numerical, real-time analysis (with T. Stanev and E. Zas), Phys. Lett. B **257** 432 (1991).

Δr beyond one loop (with B.A. Kniehl), Nucl. Phys. B **353** 567 (1991).

Gamma rays and energetic particles from primordial black holes (with J.H. MacGibbon, T.C. Weekes and E. Zas), Nature **353** 807 (1991).

Top mass from the muon lifetime (with D.A. Morris), Particle World **2** 10 (1991).

Elastic scattering at $\sqrt{s}$ = 1800 GeV—The first look at the asymptotic nucleon (with M. Block and B. Margolis), Phys. Lett. B **252** 481 (1990).

The photoproduction threshold: Implications for air showers (with T.K. Gaisser, T. Stanev and E. Zas), Phys. Lett. B **243** 444 (1990).

Gamma-ray astronomy above 50 TeV with muon-poor showers (with T.K. Gaisser *et al*.), Phys. Rev. D **43** 314 (1990).

The top quark mass from weak boson masses without neutral currents (with D.A. Morris), Phys. Lett. B **237** 107 (1990).

Do we understand the resummation of soft gluons in *W* events? (with R.S. Fletcher *et al*.), Phys. Lett B **237** 113 (1990).

Neutrino counting with *W*, *Z* and weak boson production by charm quarks (with K. Hagiwara and C.S. Kim), Phys. Rev. D **41** 1471 (1990).

Theoretical implications of Tevatron total and elastic differential cross section measurements (with M. Block *et al*.), Phys. Rev. D **41** 978 (1990).

Probing the gluon structure of the photon with HERA (with R. Fletcher and R.W. Robinett), Phys. Lett. B **225** 176 (1989).

How well do we know the Kobayashi-Maskawa Matrix? (with J.R. Cudell and S. Pakvasa), Phys. Rev. D **40** 1562 (1989).

Bizarre Radiation from Hercules X-1, Physics World **2** 14 (1989).

Coplanar jets (with D. Morris), Phys. Rev. D **42** 1435 (1990).

Cosmology with 100 TeV gamma-ray telescopes (with R. Protheroe *et al*.), Phys. Rev. D **41** 342 (1990).

Direct measurement of the charm structure of the nucleon in prompt photon experiments (with R.S. Fletcher and E. Zas), Phys. Lett. B **221** 403 (1989).

Top-quark signatures at the Tevatron collider (with C.S. Kim and A.D. Martin), Mod. Phys. Lett. A **4** 1531 (1989).

Forward-scattering amplitudes in semi-hard QCD (with B. Margolis *et al*.), Phys. Lett. B **213** 221 (1988).

Muons in gamma showers (with M. Drees and K. Hikasa), Phys. Rev. D **39**, 1310 (1989).

Weak boson production at TeVatron energies (with E.L. Berger *et al*.), Phys. Rev. D **40** 83 (1989); Erratum, *ibid*. **40**, 3789 (1989).

Hadron structure of high-energy photons (with M. Drees), Phys. Rev. Lett. **61** 275 (1988).

On CP violation experiments using hadron colliders (with R.S. Fletcher and C.S. Kim), Phys. Lett. B **209** 351 (1988).

The Standard Model with three generations: Closing in on the top-quark mass (with C.S. Kim and S. Pakvasa), Intl. J. Mod. Phys. A **4** 753 (1989).

Ultra-high energy radiation from young supernovae (with T. Stanev and T.K. Gaisser), Nature **332** 314 (1988).

The Standard Model and proton-antiproton colliders in the ACOL/TEV I era (with J.R. Cudell and C.S. Kim), Int. J. Mod. Phys. A **3** 1051 (1988).

Number of neutrinos from *W*, *Z* hadroproduction: Last count (with C.S. Kim and S. Willenbrock), Phys. Rev. D **37** 229 (1988).

Is a low-mass top quark ruled out? (with J.R. Cudell *et al*.), Phys. Lett. B **196** 227 (1987).

Forward/backward asymmetry of hadroproduced heavy quarks in QCD (with C.S. Kim and P. Hoyer), Phys. Lett. B **195** 74 (1987).

Mass limits on particles from pulsed sources: How reliable are they? (with J.R. Cudell and P. Hoyer), Phys. Rev. D **36** 1657 (1987).

Supersymmetric cosmic accelerators: Fluxes at Earth and companion stability (with J.R. Cuddell), Phys. Rev. D **36** 346 (1987).

Photon interaction with matter: Is there a threshold at multi-TeV energy? (with P. Hoyer and N. Yamdagni), Phys. Lett. B **190** 211 (1987).

Evidence for multiple-parton interactions from the observation of multi-muon events in Drell-Yan experiments (with P. Hoyer and J. Stirling), Phys. Lett. **188** 375 (1987).

Physics from J/Ψ tags in $\bar{p}p$ collisions (with E.W.N. Glover and A.D. Martin), Phys. Lett. B **185** 441 (1987).

Non-accelerator quark matter physics, Nucl. Phys. A **461** 181 (1987).

Resolution of two charm puzzles: Hadroproduction and neutrino-induced, same-sign dimuons (with J.R. Cudell and K. Hikasa), Phys. Lett. B **175** 227 (1986).

It is likely that $m_t < m_w$, Phys. Lett. B **182** 388 (1986).

Particle physics with cosmic accelerators (with K. Hikasa and T. Stanev), Phys. Rev. D **34** 2061 (1986).

Counting neutrinos with monojets (with K. Hikasa), Phys. Lett. B **168** 135 (1986).

J/Ψ as a flavor tag for fourth-generation *b*' quarks (with E.W.N. Glover and A.D. Martin), Phys. Lett. B **176** 480 (1986).

Multiplicities in a QCD-motivated description of very–high-energy particle interactions (with T.K. Gaisser *et al*.), Phys. Lett. B **166** 219 (1986).

Structure in the momentum distribution of *W*, *Z*: A unified description of $p\ \bar{p}$ collider anomalies (with K. Hikasa), Phys. Lett. B **152** 369 (1985).

Number of neutrinos in the Standard Model and its extensions to supersymmetry (with G. Eilam *et al*.), Phys. Rev. Lett. **54** 1759 (1985).

On the radiation from Cygnus X-3 (with M.V. Barnhill *et al*.), Nature **317** 409 (1985).

Evidence for stabilized strange quark matter in cosmic rays? (with H.C. Liu), Phys. Rev. D **32** 1716 (1985).

Anomalous missing-p_T events at the CERN $p\ \bar{p}$ collider: The Standard Model re-examined (with J.R. Cudel and K. Hikasa), Phys. Lett. B **157** 447 (1985).

Muons in gamma showers from Cygnus X-3? (with T. Stanev and T.K. Gaisser), Phys. Rev. D **32** 1244 (1985).

"Soft" hard scattering in the TeV range (with T.K. Gaisser), Phys. Rev. Lett. **54** 1754 (1985).

Heavy quark production by hadrons: Gluon jet fragmentation vs. fusion (with P. Hoyer), Phys. Lett. B **154** 324 (1985).

Direct photons in jets (with R. Gandhi and F. Herzog), Phys. Lett. B **152** 261 (1985).

Prompt (di)leptons associated with $\bar{p}p$ collider jets (with F. Herzog), Phys. Lett. B **151** 295 (1985).

Heavy quarks and prompt leptons in $\bar{p}p$ collider jets (with F. Herzog), Phys. Rev. D **30** 2326 (1984).

The J/Ψ as a trigger in $\bar{p}p$ collisions (with F. Herzog *et al*.), Phys. Rev. D **30** 700 (1984).

Lepton pairs below Z^0: A detailed study (with E.W.N. Glover and A.D. Martin), Phys. Lett. B **141** 429 (1984).

The process $e^+e^- \rightarrow q\ \bar{q}\gamma$ and the electric charge of colored quarks (with J. Cudell and F. Herzog), Phys. Lett. B **140** 83 (1984).

Light scalars and SU(5) predictions for $\sin^2\Theta_\omega$ and the proton lifetime (with K. Hagiwara and K. Hikasa), Phys. Lett. B **141** 372 (1984).

Jets in $\bar{p}p$ collisions: Radiation zeroes and the electric charges of colored quarks (with K. Hagiwara and F. Herzog), Phys. Lett. B **135** 324 (1984).

Limits to the number of neutrinos: A comment on the Z^0 discovery (with K. Mursula), Phys. Rev. Lett. **51** 857 (1983).

Jets in $\bar{p}p$ collider events: Systematic tests of the hard-scattering picture (with P. Hoyer), Phys. Lett. B **130** 326 (1983).

Old quark backgrounds in new quark searches (w/D.M. Scott), Phys. Lett. B **129** 341 (1983).

What do measurements of M_W and M_Z tell us about the top quark and Higgs boson masses? (with Z. Hioki and M. Konuma), Phys. Lett. B **126** 129 (1983).

The search for matter in its quark-gluon phase, Contemp. Phys. **24** 591 (1983).

Production of heavy quarks: A non-perturbative approach (with W.-Y. Keung and D.M. Scott), Phys. Rev. D **27** 1631 (1983).

Hadronic $\Psi\Psi$ events: Evidence for B-meson production (with V. Barger and W.-Y. Keung), Phys. Lett. B **119** 453 (1982).

Formation and signature of quark matter in relativistic ion collisions (with J. Cleymans and M. Dechantsreiter), Zeit. für Phys. C **17** 341 (1983).

Beam dump e/μ asymmetry of charged Higgs origin (with V. Barger *et al*.), Phys. Lett. B **116** 357 (1982).

The transverse hadronic energy accompanying weak bosons (with A.D. Martin *et al*.), Zeit. für Phys. C **17** 351 (1982).

Production of Heavy Quarks, Rapporteur's Talk, in Proc. of XXIst Intl. Conf. on High Energy Physics, Paris, France, J. de Phys., **43** suppl. 12 C3-381 (1982).

Measuring higher-order chromodynamics on the Z^0 (with A.D. Martin and D.M. Scott), Phys. Lett. B **112** 160 (1982).

A comprehensive explanation of cosmic-ray "anomalies:" Quark matter formation by heavy nuclear primaries (with H.C. Liu), Phys. Rev. Lett. **48** 771 (1982).

A new Higgs trigger in e^+e^- collisions (with W.-Y. Keung and V. Barger), Phys. Lett. B **110** 323 (1982).

Production and detection of the Higgs boson via heavy particles (with V. Barger and W.-Y. Keung), Phys. Rev. D **25** 1838 (1982).

Experimental signatures of phase transition to quark matter in high-energy collisions of nuclei (with H.C. Liu), Phys. Rev. D **25** 1842 (1982).

Identification of *W* bosons in $\bar{p}p$ collisions: A detailed study (with A.D. Martin and D.M. Scott), Phys. Rev. D **25** 754 (1982).

Consequences of diffractive heavy flavor production (with A.D. Martin and D.M. Scott), Zeit. für Phys. C **13** 291 (1982).

The central and diffractive components of charm production (with V. Barger and W.-Y. Keung), Phys. Rev. D **25** 112 (1982).

How to expose *t*-quarks in $\bar{p}p$ collisions (with M. Dechantsreiter *et al*.), Phys. Rev. D **25** 258 (1982).

Diffractive production of heavy quarks: Perturbative QCD after all (with V. Barger and W.-Y. Keung), Phys. Rev. D **24** 1328 (1981).

An analysis of lepton pairs from π beams: Another problem for perturbative Drell-Yan? (with D.M. Scott), Phys. Rev. D **24** 2433 (1981).

Accompanied and unaccompanied direct photons (with M. Dechantsreiter and D. M. Scott), Phys. Rev. D **24** 11 (1981).

Angular zeros of Brown, Mikaelian, Sahdev, and Samuel and the factorization of tree amplitudes in gauge theories (with C.J. Goebel & J. Leveille), Phys. Rev D **23** 2682 (1981).

Quark counting & production of hyperons (w/T.K. Gaisser), Phys. Rev. D **23** 1211 (1981).

Quantum chromodynamics and leptoproduction as a large p_T process (with D.M. Scott), Zeit. für Phys. **8** 85 (1981).

Structure of direct photon events (with M. Dechantsreiter and D.M. Scott), Phys. Rev. D **22** 1617 (1980).

Chromodynamics and the transverse momentum of jets and their hadron fragments in e^+e^- annihilation (with D.M. Scott), Ann. Phys **135** 1 (1981).

Chromodynamics and jet-acollinearity in e^+e^- annihilation: Determining the quark-gluon coupling (with D.M. Scott), Phys. Lett. B **94** 405 (1980).

Double Drell-Yan annihilations in hadron collisions: Novel tests of the constituent picture (with C. Goebel and D.M. Scott), Phys. Rev. D **22** 2789 (1980).

Comments on the recent observation of the hadroproduction of prompt photons (with D.M. Scott), Phys. Rev. D **21** 1320 (1980).

Chromodynamics and the transverse momentum of secondaries in high-energy e^+e^- annihilation (with J. Cleymans *et al*.), Phys. Lett. B **89** 403 (1980).

Calculations of lepton pair spectra to leading logarithms in quantum chromodynamics (with D.M. Scott), Phys. Rev. D **21** 131 (1980).

Very–high-energy antiproton physics: Colliding 1-TeV antiquarks on heavy nuclei (with P. McIntyre), Phys. Rev. D **21** 726 (1980).

Hadron colliders guide to the properties and signatures of heavy quarks (with S. Pakvasa *et al*.), Phys. Rev. D **20** 2862 (1979).

Chromodynamics and the Feynman-*x* dependence of lepton pairs in hadron collisions (with D.M. Scott), Phys. Rev. D **19** 1 (1979).

“Almost direct” photons (with D.M. Scott), Phys. Lett. B **80** 410 (1978).

Another look at the prompt lepton puzzle (with D.M. Scott), Phys. Lett. B **79** 123 (1978).

Chromodynamics and the experimental signature of weak bosons (with D.M. Scott), Phys. Lett. B **78** 318 (1978).

Hadroproduction of photons and leptons (with D.M. Scott), Phys. Rev. D **18** 3378 (1978).

Testing quantum chromodynamics in the hadroproduction of real and virtual photons (with D.M. Scott), Phys. Rev. Lett. **40** 1117 (1978).

Scaling violations in deep inelastic lepton scattering: How important is charm? (with D.M. Scott), Phys. Lett. B **72** 404 (1978).

Can parton Fermi motion reconcile canonical scaling with hadronic high-p_T data (with G. Ringland and R.G. Roberts), Phys. Rev. Lett. **40** 991 (1978).

Hadroproduction of quark flavors (with S. Matsuda), Phys. Rev. D **17** 1344 (1978).

CVC for gluons and hadroproduction of quark flavors, Phys. Lett. B **69** 105 (1977).

What is the transverse momentum of partons? (with F.E. Close and D.M. Scott), Phys. Lett. B **68** 477 (1977).

Can one really observe signatures of the weak interaction with multi-TeV colliding hadron rings?, Phys. Rev. D **15** 1929 (1977).

Energy dependence and scaling of the spin correlation and polarization parameters in elastic proton-proton scattering (with L. Durand), Phys. Rev. D **15** 352 (1977).

Hadronic production of narrow vector mesons (with E.A. Paschos and T.K. Gaisser), Phys. Rev. D **15** 2572 (1977).

Backward polarization as a direct experimental measure of peripherality (with M.G. Olsson and A. Yokosawa), Nucl. Phys. B **113** 269 (1976).

Long-lived tracks in emulsions: New hadrons or background (with T.K. Gaisser), Phys. Rev. D **14** 3153 (1976).

Production of Φ, Ψ and charmed particles in strong interactions (with T.K. Gaisser), Phys. Rev. D **13** 171 (1976).

An optical interpretation of polarization parameters (with L. Durand), Nucl. Phys. B **104** 317 (1976).

Do direct leptons with large transverse momentum originate from Ψ production? (with K. Kajantie), Phys. Lett. B **57** 361 (1975).

Systematics of vector meson-proton scattering (with K. Kajantie), Phys. Lett. B **56** 347 (1975).

On the strong production mechanisms and total cross sections of Ψ particles (with T.K. Gaisser and K. Kajantie), Phys. Rev. D **12** 1968 (1975).

Phenomenology of production of massive and new particles in hadronic interactions (with T.K. Gaisser), Phys. Rev. D **11** 3157 (1975).

High transverse momentum secondaries in cosmic-ray interactions up to 10^7 GeV, Nucl. Phys. B **92** 404 (1975).

Proton-proton total cross sections above 10^4 GeV: Can cosmic rays give the answer? (with V. Barger *et al*.), Phys. Rev. Lett. **33** 1051 (1974).

Exchange mechanism of proton-proton scattering and the trend of polarized beam cross sections at intermediate energies (with G.H. Thomas), Phys. Rev. D **10** 344 (1974).

Competing scaling laws in deep inelastic hadron collisions (with J. Luthe), Phys. Lett. B **48** 440 (1974).

High transverse momentum secondaries and rising total cross sections in cosmic-ray interactions (with D. Cline and J. Luthe), Phys. Rev. Lett. **31** 491 (1973).

Scaling limit of *pp* elastic scattering (with V. Barger and R.J.N. Phillips), Nucl. Phys. B **61** 522 (1973).

Line reversal in baryon exchange reactions and the energy dependence of dip locations (with V. Barger and R.J.N. Phillips), Nucl. Phys. B **57** 401 (1973).

Hadron collisions at high transverse momentum (with D. Cline and M. Waldrop), Nucl. Phys. B **55** 157 (1973).

Tests of the absence of exotic exchange (w/J. Mandula *et al*.), Nucl. Phys. B **54** 199 (1973).

Evaluation of scaling in large-angle *pp* collisions (with V. Barger and J. Luthe), Phys. Lett. B **42** 428 (1972).

Exchange structure of N, Δ backward peak (with V. Barger and M.G. Olsson), Nucl. Phys. B **49** 206 (1972).

Refereed Publications & arXiv Papers

The structure of elastic scattering: Is tensor exchange peripheral? (with V. Barger and K. Geer), Nucl. Phys. B **49** 302 (1972).

On the nature of absorption (with V. Barger and K. Geer), Nucl. Phys. B **44** 475 (1972).

Empirical Systematics of πN amplitudes (with V. Barger), Phys. Rev. D **6** 1918 (1972).

Successes & failures of dual-absorption models (w/ V. Barger), Nucl. Phys. B **43** 62 (1972).

Resolution of the πN helicity conservation question from polarization data alone (with V. Barger), Phys. Rev. Lett. **28** 194 (1972).

Amplitude analysis of πN scattering at 6 GeV/c (w/ C. Michael), Phys. Lett. B **36** 367 (1971).

Bounds on polarization in πN scattering from isotopic spin invariance (with G.V. Dass *et al*.), Phys. Lett. B **36** 339 (1971).

A Regge parametrization for low-energy πN scattering (with P. Minkowski), Nuovo Cim. A **1** 59 (1971).

Duality and backward peaks, Conf. Proc. CERN C **710307** 65 (1971).

Building meson baryon amplitudes from duality (with P. Auvil and C. Michael), Nucl. Phys. B **25** 317 (1970).

Interference of *t* and *u* channel amplitudes in πN scattering (with P. Auvil and B. Margolis), Phys. Lett. B **32** 709 (1970).

Baryon regge residues (with J. Froyland and B. Pettersson), CERN-TH-1255 (1970).

Regge poles with kinematic cuts in πN backward scattering (with A. Kumar, A.D. Martin and C. Michael), Phys. Lett. B **32** 111 (1970).

Broken exchange degeneracies and secondary trajectories in charge and hypercharge exchange reactions (with P. Auvil *et al*.), Phys. Lett. B **31** 303 (1970).

The coupling of π and A_1 trajectories by duality (with P. Auvil), Nucl. Phys. B **19** 29 (1970).

Test of duality sum rules for mesons (with P. Auvil), Nuovo Cim. A **66** 293 (1969).

Broken symmetries of hadrons, Ph.D. thesis, Katholieke Universiteit Leuven (1969).

On resonance interpretation in Argand diagrams (with P. Minkowski), Nucl. Phys. B **14** 522 (1969).

Influence of pair correlations on the phase transition in an Ising lattice (with R. Dekeyser), Phys. Rev. **182** 949 (1969).

Isobars sharing the quantum numbers of the nucleon (with P. Minkowski), Lett. Nuovo Cim. **I** 789 (1969).

Baryon resonances and SU(3) mixing (with M. Konuma), Progress of Theoretical Physics **40** 99 (1968).

Self-consistent calculation of the N^* parameters (with R. Gastmans), Nuovo Cim. A **54** 1013 (1968).

A boson 27-plet in the unitary symmetry model (w/R. Gastmans), Nuovo Cim. A **55** 1 (1968).

A phenomenological quark-antiquark potential, Nuovo Cim. 48 1142 (1967)

Boson 27-plet in the unitary symmetry model (with R. Gastmans), NP-17486 (1967).

Summary Talks

"Production of Heavy Flavors," *XXIst Intl. Conf. on High Energy Physics*, Paris, France, 1982.

The Xth Intl. Conf. on Physics in Collision, Duke University, Durham, NC, 1990.

Panel in *Proc. of the 5th Intl. Workshop on Neutrino Telescopes*, Instituto Veneto di Scienze, Lettere ed Arti, Venice, Italy, 1993, ed. by M. Baldo-Ceolin (U. of Padua).

The Vth Blois Workshop, Intl. Conf. on Elastic and Diffractive Scattering, Brown University, Providence, RI, 1993, ed. by H.M. Fried, K. Kang and C.I. Tan (World Scientific, River Edge, NJ, 1994).

Concluding Remarks in *the 14th Intl. Workshop on Weak Interactions*, Seoul, Korea, 1993, ed. by J.E. Kim and S.K. Kim (World Scientific, River Edge, NJ, 1994).

Snowmass 94: Nuclear and Particle Astrophysics and Cosmology into the Next Millenium, Snowmass, Colorado, 1994, ed. by E.W. Kolb and R.D. Peccei (World Scientific, River Edge, NJ, 1995).

The XXXIInd Rencontres de Moriond: Very High Energy Phenomena in Astrophysics, Les Arcs, France, January 1997, ed. by Y. Giraud-Heraud and J. Tran Thanh Van (Editions Frontieres, Paris, 1997).

Workshop on High-Energy Cosmic Neutrinos: *Origin, Production and Detection*, Marseille, France, 1997.

The 2nd Meeting on New Worlds in Astroparticle Physics, University of the Algarve, Faro, Portugal, 1998, ed. by A. Mourão *et al*. (World Scientific, 1999).

Summary and Outlook in *the XXII Intl. Symposium on Lepton-Photon Interactions at High Energy*, Uppsala, Sweden, 2005, ed. by R. Brenner *et al*., (World Scientific, Hackensack, NJ), Jour. Mod. Phys. A **21** 2000 (2006); hep-ph/0510276.

Joint Meeting of the US Division of Particles and Fields, *the Japan Physical Society and the Particle Physicists of the Pacific Region*, Honolulu, Hawaii, 2006.

Physics in Collision, Vancouver, British Columbia, 2011.

Symposium on Cosmology and Particle Astrophysics (COSPA 2013), Honolulu, Hawaii.

Very High Energy Particle Astrophysics (VHEPA 2016), Honolulu, Hawaii, 2016.

7th Intl. Symposium on Large TPCs for Low-energy Rare Event Detection (TPC 2016), Paris, France, 2016.

TeV Particle Astrophysics (TeVPA 2017), Columbus, Ohio, 2017.

History of the Neutrino, Paris, France, 2018.

XVII Intl. Workshop on Neutrino Telescopes, Venice, Italy (2019).

Other Publications

Proposal to upgrade the MIPP experiment (MIPP collaboration), FERMILAB-PROPOSAL-0960 (Sep 2006); hep-ex/0609057.

From AMANDA to IceCube (with M. Heinemann), Bild. Wiss. **N6** 56 (2004).

Results from AMANDA (AMANDA collaboration, C. Wiebusch *et al*.) CERN EP seminar, Mod. Phys. Lett. A **17** 2019 (2002).

Antarctic Dreams, in *Best American Science Writing 2000*, ed. by James Gleick (Ecco Press, HarperColllins, NY, 2000).

System Considerations for a Digital Optical System for a Large-Scale Neutrino Observatory (with H. Kirkham *et al*.), Review of Scientific Instruments (1998).

FELIX: The Astroparticle Connection (with L.W. Jones), University of Wisconsin preprint MADPH-97-998, published in the FELIX Letter of Intent (1997).

Neutrino Fluxes from Gamma-Ray Bursts: Model-Independent Estimates (with E. Zas), University of Wisconsin preprint MADPH-97-997.

The Pierre Auger Project Design Report, Fermilab-Pub-96-024 (1996).

Report of the Committee on Cosmic Ray Physics (with T.K. Gaisser *et al*.), National Academy Press (1995).

National Research Council Report of the Committee on Cosmic Rays (with T.K. Gaisser *et al*.), National Academy Press (1994).

Gluon Interactions and Proton Scattering (with B. Margolis and P. Valin) in "*Symmetry Violations in Subatomic Physics,*" ed. by B. Castel and P.J. O'Donell (World Scientific, 1988).

Point Sources and a New Generation of Cosmic Ray Experiments in "*New Aspects of Very High Energy Proton-Proton Physics,*" ed. by A. Ali (Plenum Press, NY, 1988).

Associated Production of Weak Bosons and Heavy Quarks with Hadron Colliders (with C.S. Kim) in "*From Colliders to Supercolliders,*" ed. by V. Barger and F, Int. J. Mod. Phys. A **2** 891 (World Scientific, 1987).

Books

Books Authored

Quarks and Leptons: An Introductory Course in Modern Particle Physics (with A.D. Martin), John Wiley and Sons, NY, 1984 (also Japanese and Russian translations).

IceCube and the Discovery of High-Energy Cosmic Neutrinos, Leo S. Olschki publishing, 2018.

Book Chapters Authored

Introduction: Particle Physics with Cosmic Accelerators, in de los Heros, C. (ed.), Probing Particle Physics with Neutrino Telescopes, World Scientific Publishing (2020).

Dark Matter in IceCube (with C. Rott), in Khlopov, M.Y. (ed.), Indirect Effects of Dark Matter Physics, World Scientific Publishing (2017).

Neutrinos from Core-Collapse Supernovae (with K. Scholberg), in Alsabti, A. W., Murdin, P. (eds.), Handbook of Supernovae, Springer International Publishing (2017).

Books Edited

Earth, Planets and Space, Terra Scientific Publishing Company **62** 2 (Tokyo, 2010 – guest editor).

Neutrino 2008 Conference Proceedings, Journal of Physics Conference Series **136** (Bristol, UK, 2009).

TeVII Conf. Proceedings, Journal of Physics Conference Series **60** (London, 2007).

From Colliders to Super Colliders (World Scientific Publishing, Singapore, 1987).

Telemark IV: Neutrino Masses and Neutrino Astrophysics (World Scientific Publishing, Singapore, 1987).

Physics Simulations at High Energy (World Scientific Publishing, Singapore, 1986).

New Particles ’85 (World Scientific Publishing, Singapore, 1985).

Proton-Antiproton Collider Physics – 1981 (Am. Institute of Physics, New York, 1982).

Proceedings of the Topical Workshop on the Production of New Particles in Super High Energy Collisions (University of Wisconsin, Madison, 1979).

Particle Interactions at Very High Energy (Plenum Press, New York, 1974).

Proceedings of the Intl. Conf. on Meson Spectroscopy (University of Bologna, 1971).

Books Reviewed

Books

Quarks, Leptons and Gauge Fields, by Kerson Huang (World Scientific Publishing, Singapore, 1987).

Elementary Particle Physics: Concepts and Phenomena, by Otto Nachtman, in Physics Today (1991).

Polar Research: Deep-frozen Science, a review of Antarctica: An Intimate Portrait of the World's Most Mysterious Continent, by Gabrielle Walker, in Nature **483** 272 (2012).

The Cosmic Cocktail: Three Parts Dark Matter, by Katherine Freese, in Nature **509** 561 (2014).

International Cosmic Ray Conference (ICRC) Proceedings

2025 – Geneva, Switzerland

IceCube Collaboration individuals posted their talks to: arXiv:/2507.08666

IceCube-Gen2 Collaboration individuals posted their talks to: arXiv:2507.08667

Highlights from the IceCube Neutrino Observatory, (IceCube Collaboration, Alexander Kappes for the collaboration), PoS ICRC2025 (2025), 1411

Measuring the galactic plane and searching for galactic PeVatrons using the IceCube Multi-Flavor Astrophysical Neutrino sample, (IceCube Collaboration, Matthias Thiesmeyer et al.), PoS ICRC2025 (2025), 1193

Performance of the Prototype Station of the IceCube Surface Array Enhancement, (IceCube Collaboration, Shefali (KIT, Karlsruhe, ETP and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 394

Spectrum of PeV Cosmic-Ray Protons and Helium Nuclei with IceCube, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 376

Prospective Sensitivity to WIMP Dark Matter with the IceCube Upgrade, (IceCube Collaboration, Eliot Genton et al.), PoS ICRC2025 (2025), 486

Cosmic-Ray Physics in the PeV to EeV Energy Range with the I Surface Array, (IceCube-Gen2 Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 387

Heavy Dark Matter Annihilation search with IceCube tracks, (IceCube Collaboration, Dan Salazar-Gallegos et al.), PoS ICRC2025 (2025), 523

Search for decoherence due to quantum gravity with the IceCube Neutrino Observatory, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1081

Improved Gamma-Hadron Separation for PeV Photon Searches with IceCube, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 837

The IceCube-Gen2 project, (IceCube-Gen2 Collaboration, Marek Kowalski et al.), PoS ICRC2025 (2025), 1080

Analysis of the Galactic Astrophysical Flux with 12.1 Years of IceCube Starting Tracks, Throughgoing Tracks and Cascades, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1135

Dark matter searches in the Galactic Center with IceCube-DeepCore and IceCube-Upgrade, (IceCube Collaboration, Nhan Chau et al.), PoS ICRC2025 (2025), 476

Sustainability and Environmental Impact of IceCube-Gen2, (IceCube-Gen2 Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1159

Search for High-Energy Neutrinos from Infrared Flare, (IceCube Collaboration, Teresa Pernice et al.), PoS ICRC2025 (2025), 1145

Characterizing IceTop response to low-energy air showers , (IceCube Collaboration, Yanee Tangjai (Chiang Mai U.) et al.), PoS ICRC2025 (2025), 412

Evidence of Neutrino Emission from X-ray Bright Seyfert Galaxies with IceCube, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1219

Machine Learning Tools for the IceCube-Gen2 Optical Array, (ceCube-Gen2 Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1201

Multi-Energy and Multi-Sample Searches for IceCube Neutrinos from LIGO/Virgo/KAGRA Gravitational Wave Events, (IceCube Collaboration, Aswathi Balagopal V. et al.), PoS ICRC2025 (2025), 915

Constraints on the Population of Common Sources of Gravitational Waves and High-Energy Neutrinos with IceCube During the Third Observing Run of the LIGO and Virgo Detectors, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 972

12-Years Observation of Seasonal Variation of Atmospheric Neutrino Flux with IceCube, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 241

Radio Detection of Cosmic Rays with the IceCube Surface Array Enhancement, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 427

Archival Search for IceCube Sub-TeV Neutrino Counterparts to Sub-Threshold Gravitational Wave Events from the Third Observing Run of the LIGO-Virgo-KAGRA, (IceCube Collaboration, Tista Mukherjee (KIT, Karlsruhe, IAP and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 954

Muon number reconstruction with IceTop using a two-component lateral distribution function, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 437

Commissioning and Testing of IceAct Telescopes at the IceCube Neutrino Observatory, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 423

Investigation of Electromagnetic and Muonic Air-Shower Components using IceTop Simulations, (IceCube Collaboration, Fahim Varsi (KIT, Karlsruhe, EKP and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 424

Measurement of All Flavor PeV Neutrino Flux using Combined Datasets from IceCube, (IceCube Collaboration, Emre Burak Yildizci (Wisconsin U., Madison and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 1217

Investigating Energy-Dependent Anisotropy in Cosmic Rays with IceTop Surface Array, (IceCube Collaboration, Rasha Abbasi (Loyola U., Chicago and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 167

Search for Neutrinos from the Galactic 4FGL Sources with the Pion-bump Signature with IceCube, (IceCube Collaboration, Alejandra Granados et al.), PoS ICRC2025 (2025), 929

Performance Study of the IceCube Upgrade Camera System, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1069

Prospects for GeV Neutrino Transient Searches with the IceCube Upgrade, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1076

Unfolding the Atmospheric Muon Flux with IceCube: Investigating Stopping Muons and High-Energy Prompt Contributions, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 281

Probing neutrino emission at GeV energies from compact binary mergers detected during O1-O4a with the IceCube Neutrino Observatory, (IceCube Collaboration, Mathieu Lamoureux (Rice U.) et al.), PoS ICRC2025 (2025), 947

Ultra-High-Energy Transient Source Search using IceCube Neutrinos and Pierre Auger Photon Candidates, (IceCube and Pierre Auger Collaborations, Maxwell Nakos (Wisconsin U., Madison) et al.), PoS ICRC2025 (2025), 955

Enhancements to the IceCube Extremely High Energy Neutrino Selection using Graph & Transformer Based Neural Networks, (IceCube Collaboration, Maxwell Nakos (Wisconsin U., Madison and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 1127

Updated Earth Tomography Using Atmospheric Neutrinos at IceCube, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1211

Limits on WIMP-Scattering Cross Sections using Solar Neutrinos with Ten Years of IceCube Data, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 502

Time Variation in the TeV Cosmic Ray Anisotropy with IceCube and Energy Dependence of the Solar Dipole, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 458

The Optical Sensor for IceCube-Gen2, (IceCube-Gen2 Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1072

A co-deployed dust-logging instrument for the IceCube Upgrade and IceCube-Gen2, (IceCube Collaboration, Martin Rongen (Erlangen - Nuremberg U., ECAP) et al.), PoS ICRC2025 (2025), 1034

Astrophysical neutrino flux measurement and search for nutau induced cascades with 11 years of IceCube data, (IceCube Collaboration, Zelong Zhang (Stony Brook U.) et al.), PoS ICRC2025 (2025), 1011

Prospects for sub-GeV astrophysical neutrino detection with IceCube, (IceCube Collaboration, Per Arne Sevle Myhr et al.), PoS ICRC2025 (2025), 1174

IceCube searches for GeV neutrino counterparts associated with high-energy starting events, (IceCube Collaboration, Christoph Raab (Louvain U., CP3 and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 1150

Advancements in the IceAct Energy Spectrum Analysis, (IceCube Collaboration, Larissa Paul (DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 355

Advances in reconstructing the cosmic-ray energy spectrum with IceTop, (IceCube

Collaboration, Lilly Pyras (Utah U.) et al.), PoS ICRC2025 (2025), 367

All-flavor Time-dependent Search for Transient Neutrino Sources, (IceCube Collaboration, Jose Carpio Dumler et al.), PoS ICRC2025 (2025), 1007

Low-latency neutrino follow-up combining diverse IceCube selections, (IceCube Collaboration, Christoph Raab (Louvain U., CP3 and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 956

A prototype station of the IceCube-Gen2 Surface Array at the Pierre Auger Observatory, (IceCube-Gen2 and Pierre Auger Collaborations, Stef Verpoest (Delaware U.) et al.), PoS ICRC2025 (2025), 428

A search for extremely-high-energy neutrinos with IceCube and implications for the ultra-high-energy cosmic-ray proton fraction, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1122

Advanced Northern Tracks Selection using a Graph Convolutional Neural Network for the IceCube Neutrino Observatory, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1183

Classification of high energy muon bundles and single muons from the southern sky in IceCube, (IceCube Collaboration, Najia Moureen Binte Amin et al.), PoS ICRC2025 (2025), 979

New Public Neutrino Alerts for Clusters of IceCube Events, (IceCube Collaboration, Sarah Louise Mancina et al.), PoS ICRC2025 (2025), 949

Probing ultra-high-energy neutrinos with the IceCube-Gen2 in-ice radio array, (IceCube-Gen2 Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1045

Measuring the Neutrino Flux in Segments along the Galactic Plane with IceCube, (IceCube Collaboration, Ludwig Neste (Stockholm U. and Stockholm U., OKC and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 1130

Enhancing searches for astrophysical neutrino sources in IceCube with machine learning and improved spatial modeling, (IceCube Collaboration, Tianlu Yuan (Wisconsin U., Madison) et al.), PoS ICRC2025 (2025), 1169

Results from IceCube Searches for High-Energy Neutrinos Coincident with Gravitational-Wave Alerts in LVK O4, (IceCube Collaboration, Zsuzsanna Marka et al.), PoS ICRC2025 (2025), 1113

Very Late Afterpulses and Search for the Neutron Echo in IceCube, (IceCube Collaboration, Kaustav Dutta (Mainz U. and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 1030

Impact of Hole-ice Calibration on High Energy Event Reconstruction with the IceCube Upgrade, (IceCube Collaboration, Kaustav Dutta (Mainz U. and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 1029

Using End-to-End Optimized Summary Statistics to Improve IceCube's Diffuse Galactic Fits, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1132

Neutrino flavor composition using High Energy Starting Events with IceCube, (IceCube Collaboration, Neha Navnitkumar Lad et al.), PoS ICRC2025 (2025), 1198

Improvements in the Reconstruction of IceCube Realtime Alerts, (IceCube Collaboration, Giacomo Sommani (Ruhr U., Bochum and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 1184

Search for GeV-PeV neutrinos from nova T Coronae Borealis with IceCube, (IceCube Collaboration, Jessie Thwaites (Wisconsin U., Madison) et al.), PoS ICRC2025 (2025), 1200

A Search for Astrophysical Neutrinos from Flaring X-ray Binaries with IceCube, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1077

IceCube population constraints on neutrino emission by Fermi-LAT detected active galactic nuclei, (IceCube Collaboration, Sam Hori (Wisconsin U., Madison and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 933

All-Sky Cosmic-Ray Anisotropy Update at Multiple Energies, (IceCube and HAWC Collaborations, Juan Carlos Díaz-Vélez (Wisconsin U., Madison and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 244

Results from IceCube Follow-up of Nearby Supernova SN2023ixf, (IceCube Collaboration, Justin Vandenbroucke (Wisconsin U., Madison) et al.), PoS ICRC2025 (2025), 1109

Measurement of the Three-Flavor Composition of Astrophysical Neutrinos with Contained IceCube Events, (IceCube Collaboration, Aswathi Balagopal V. (Delaware U. and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 983

Status and performance of mass-produced IceCube Upgrade mDOMs, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1040

Machine learning driven reconstruction of cosmic-ray air showers for next generation radio arrays, (IceCube-Gen2 Collaboration, Paras Koundal (Delaware U., Bartol Inst. and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 309

Determining the orientation of radio antennas at the South Pole using Galactic noise measurements, (IceCube Collaboration, Paras Koundal (Delaware U. and Delaware U., Bartol Inst. and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 308

Combining IceCube Muon Tracks and Cascades to measure the Galactic Diffuse Neutrino Flux, (IceCube Collaboration, Jonas Hellrung (Ruhr U., Bochum and Ruhr U., Astron. Inst. and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 1056

Search for Sub-Relativistic Magnetic Monopoles with the IceCube Neutrino Observatory, (IceCube Collaboration, Jonas Häußler (Aachen, Tech. Hochsch. and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 492

Measurement of the Diffuse Astrophysical Neutrino Spectrum above a TeV with All Flavor Starting Events in IceCube, (IceCube Collaboration, Aswathi Balagopal V. (Delaware U.) et al.), PoS ICRC2025 (2025), 985

IceCat-2: Updated IceCube Event Catalog of Alert Tracks, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1224

Mapping the ice stratigraphy in IceCube using camera deployment footage, (IceCube Collaboration, Martin Rongen (Erlangen - Nuremberg U., Theorie III) et al.), PoS ICRC2025 (2025), 1035

An updated list of target sources for IceCube neutrino cluster alerts, (IceCube Collaboration, Caterina Boscolo Meneguolo (Padua U. and DESY, Zeuthen) et al.), PoS ICRC2025 (2025), 919

State of the Ice Model in IceCube observatory, (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2025 (2025), 1013

Linking hard X-ray and high-energy neutrino emission from radio-loud and radio-quiet AGN, (Emma Kun, Imre Bartos, Julia Becker Tjus, Peter L. Biermann, Anna Franckowiak et al.), PoS ICRC2025 (2025), 1085

2023 – Nagoya, Japan

IceCube Collaboration individuals posted their talks to: arXiv:/2307.13047

IceCube-Gen2 Collaboration individuals posted their talks to: arXiv: 2307.13048

Highlights from the IceCube Neutrino Observatory (IceCube Collaboration, Naoko Kurahashi Neilson et al.), PoS ICRC2023 (2024), 017

Measurement of the Cosmic Neutrino Flux from the Southern Sky using 10 years of IceCube Starting Track Events (IceCube Collaboration, Manuel Silva (Wisconsin U., Madison) et al.), PoS ICRC2023 (2023), 1008

Joint searches by FACT, H.E.S.S., MAGIC and VERITAS for VHE gamma-ray emission associated with neutrinos detected by IceCube (IceCube and HESS and MAGIC Collaborations, Fabian Schüssler et al.), PoS ICRC2023 (2023), 1501

Search for TeV Neutrinos from Seyfert Galaxies in the Southern Sky using Starting Track Events in IceCube (IceCube Collaboration, Shiqi Yu (Michigan State U.) et al.), PoS ICRC2023 (2024), 1533

Multiplicity of TeV muons in extensive air showers detected with IceTop and IceCube (IceCube Collaboration, Stef Verpoest (Delaware U., Bartol Inst. and Munich, Tech. U.) for the collaboration.), PoS ICRC2023 (2023), 207

Three-year performance of the IceAct telescopes at the IceCube Neutrino Observatory (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 367

Towards a cosmic ray composition measurement with the IceAct telescopes at the IceCube Neutrino Observatory (IceCube Collaboration, Larissa Paul (Marquette U. and South Dakota Sch. Mines Tech.) et al.), PoS ICRC2023 (2023), 237

A multi-detector EAS reconstruction framework for IceCube (IceCube Collaboration, Agnieszka Leszczynska et al.), PoS ICRC2023 (2023), 366

Status and plans for the instrumentation of the IceCube Surface Array Enhancement (IceCube Collaboration, Frank G. Schröder et al.), PoS ICRC2023 (2023), 342

A Two-Component Lateral Distribution Function for the Reconstruction of Air-Shower Events in IceTop (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 357

Estimation of Xmax for air showers measured at IceCube with elevated radio antennas of a prototype surface station (IceCube Collaboration, Roxanne Turcotte-Tardif et al.), PoS ICRC2023 (2023), 326

The Surface Array of IceCube-Gen2 (IceCube-Gen2 Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 205

Cosmic-Ray Composition with IceTop and IceCube using graph neural networks (IceCube Collaboration, Paras Koundal et al.), PoS ICRC2023 (2023), 334

Cosmic Ray Anisotropy with 11 Years of IceCube Data (IceCube Collaboration, Markus Ackermann et al.), PoS ICRC2023 (2023), 360

Performance Studies of the Acoustic Module for the IceCube Upgrade (IceCube-Gen2 Collaboration, Charlotte Benning (RWTH Aachen U.) et al.), PoS ICRC2023 (2023), 241

Sensitivity of the IceCube-Gen2 Surface Array for Cosmic-Ray Anisotropy Studies (IceCube-Gen2 Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 354

Accounting for changing snow over 10 years of IceTop, and its impact on the all-particle cosmic ray spectrum (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 377

Search for Cosmic-Ray Events Using Radio Signals and CNNs in Data from the IceTop Enhancement Prototype Station (IceCube Collaboration, Abdul Rehman et al.), PoS ICRC2023 (2023), 291

Probing neutrino emission at GeV energies from astrophysical transient events with the IceCube Neutrino Observatory (IceCube Collaboration, Gwen De Wasseige et al.), PoS ICRC2023 (2023), 1513

First results of low-energy neutrino follow-ups of Run O4 compact binary mergers with the IceCube Neutrino Observatory (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1571

IceCube search for neutrinos from novae (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1560

H.E.S.S. realtime follow-ups of IceCube high-energy neutrino alerts (H.E.S.S. and IceCube Collaborations, Federica Bradascio (IRFU, Saclay) et al.), PoS ICRC2023 (2023), 1546

IceCube search for neutrinos from GRB 221009A (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1511

Public Kaggle Competition “IceCube - Neutrinos in Deep ice” (IceCube Collaboration, Philipp Eller et al. PoS ICRC2023 (2023), 1609

Tidal Disruption: An Unforgettable Encounter with a Black Hole (IceCube Collaboration, Vedant Basu et al.), PoS ICRC2023 (2023), 975

An improved mapping of ice layer undulations for the IceCube Neutrino Observatory (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 975

Approximating new ice models with B-splines for improved IceCube event reconstruction: application to cascades and tracks (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1005

Updated directions of IceCube HESE events with the latest ice model using DirectFit (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1030

Towards a more robust reconstruction method for IceCube's real-time program (IceCube Collaboration, Cristina Lagunas Gualda (DESY, Zeuthen) et al.), PoS ICRC2023 (2023), 1186

Seasonal Variations of the Atmospheric Neutrino Flux measured in IceCube (IceCube Collaboration, Karolin Hymon (Tech. U., Dortmund (main)) et al.), PoS ICRC2023 (2023), 993

Performance studies on new 4" photomultiplier types intended for IceCube-Gen2 optical modules (IceCube-Gen2 Collaboration, Markus Dittmer (Munster U., ITP) et al.), PoS ICRC2023 (2023), 1465

TXS 0506+056 with Updated IceCube Data (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1465

Observation of High-Energy Neutrinos from the Galactic Plane (IceCube Collaboration, Stephen Sclafani et al.), PoS ICRC2023 (2023), 1108

Angular dependence of the atmospheric neutrino flux with IceCube data (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1009

Sensitivity of the IceCube Upgrade to Atmospheric Neutrino Oscillations (IceCube Collaboration, Philipp Eller (Munich, Tech. U.) et al.), PoS ICRC2023 (2023), 1036

The Wavelength-Shifting Optical Module in Application to the IceCube Neutrino Observatory (IceCube Collaboration, Yuriy Popovych et al.), PoS ICRC2023 (2023), 992

Estimating the coincidence rate between the optical and radio array of IceCube-Gen2 (IceCube-Gen2 Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1022

The next generation neutrino telescope: IceCube-Gen2 (IceCube-Gen2 Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 994

From PeV to TeV: Astrophysical Neutrinos with Contained Vertices in 10 years of IceCube Data

(IceCube Collaboration, Vedant Basu (Wisconsin U., Madison) et al.), PoS ICRC2023 (2023), 1007

Galactic and Extragalactic Analysis of the Astrophysical Muon Neutrino Flux with 12.3 years of IceCube Track Data (IceCube Collaboration, Philipp Michael Fuerst (RWTH Aachen U. and NIKHEF, Amsterdam and CERN) et al.), PoS ICRC2023 (2023), 1046

Search for Neutrino Emission at the Galactic Center Region with IceCube (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1051

Exploring the Galactic neutrino flux origins using IceCube datasets (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1048

Exploring the Galactic neutrino flux origins using IceCube datasets (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1048

Multi-flavour neutrino searches from the Milky Way Galaxy (IceCube Collaboration, Pierpaolo Savina et al.), PoS ICRC2023 (2023), 1010

Operations plans and sensitivities of the IceCube Upgrade camera system (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1003

Data-based evaluation of direction reconstruction for IceCube cascade events by utilizing starting tracks (IceCube Collaboration, Yosuke Ashida for the collaboration), PoS ICRC2023 (2023), 980

Conditional normalizing flows for IceCube event reconstruction (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1003

Electronics Design of the IceCube-Gen2 Optical Module Prototype (IceCube-Gen2 Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1034

Mechanical design of the optical modules intended for IceCube-Gen2 (IceCube-Gen2 Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 979

Direction reconstruction performance for IceCube-Gen2 Radio (IceCube-Gen2 Collaboration, Sjoerd Bouma et al.), PoS ICRC2023 (2023), 1045

A model independent parametrization of the optical properties of the refrozen IceCube drill holes (IceCube Collaboration, Philipp Eller (Munich, Tech. U.) et al.), PoS ICRC2023 (2023), 1034

Detailed investigations of PMTs in optical sensors for neutrino telescopes such as IceCube Upgrade (IceCube Collaboration, Berit Schlüter (Munster U. and Munich, Tech. U.) et al.), PoS ICRC2023 (2023), 988

Refining the IceCube detector geometry using muon and LED calibration data (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 988

A time variability test for neutrino sources identified by IceCube (IceCube Collaboration, Pranav Dave (Georgia Tech) et al.), PoS ICRC2023 (2023), 973

Measurement of the astrophysical diffuse neutrino flux in a combined fit of IceCube's high energy neutrino data (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1064

Summary of IceCube tau neutrino searches and flavor composition measurements of the diffuse astrophysical neutrino flux (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1122

Sensitivity of IceCube-Gen2 to measure flavor composition of Astrophysical neutrinos (IceCube-Gen2 Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1123

All-Energy Search for Solar Atmospheric Neutrinos with IceCube (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1116

Recent neutrino oscillation results with the IceCube experiment (IceCube Collaboration, Shiqi Yu et al.), PoS ICRC2023 (2023), 1143

Extending the IceCube search for neutrino point sources in the Northern sky with additional years of data (IceCube Collaboration, Chiara Bellenghi (Munich, Tech. U.) et al.), PoS ICRC2023 (2023), 1060

Search for Extremely High Energy Neutrinos with IceCube (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1149

2D Convolutional Neural Network for Event Reconstruction in IceCube DeepCore (IceCube Collaboration, Joshua Henry Peterson (Wisconsin U., Madison) et al.), PoS ICRC2023 (2023), 1129

Cross Correlation of IceCube Neutrinos with Tracers of Large Scale Structure (IceCube Collaboration, David Joseph Guevel (Wisconsin U., Madison) et al.), PoS ICRC2023 (2023), 1141

Deep Learning Based Event Reconstruction for the IceCube-Gen2 Radio Detector (IceCube-Gen2 Collaboration, Nils Heyer (Uppsala U.) et al.), PoS ICRC2023 (2023), 1102

A new simulation framework for IceCube Upgrade calibration using IceCube Upgrade Camera system (IceCube Collaboration, Christoph Tönnis (Sungkyunkwan U.) et al.), PoS ICRC2023 (2023), 1096

Constraining MeV Neutrino Emission of Bright Transients with IceCube (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1096

Search for the Prompt Atmospheric Neutrino Flux in IceCube (IceCube Collaboration, Jakob Boettcher et al.), PoS ICRC2023 (2023), 1068

Extending SkyLLH software for neutrino point source analyses with 10 years of IceCube public data (IceCube Collaboration, Chiara Bellenghi (Munich, Tech. U.) et al.), PoS ICRC2023 (2023), 1061

Search for high-energy neutrino emission from hard X-ray AGN with IceCube (IceCube Collaboration, George C. Privon et al.), PoS ICRC2023 (2023), 1032

Sentinel of the extraordinary: the IceCube alert system for neutrino flares (IceCube Collaboration, Caterina Boscolo Meneguolo (Pisa U.) et al.), PoS ICRC2023 (2023), 1500

Search for High-Energy Neutrinos from TDE-like Flares with IceCube (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1478

Search for high-energy neutrino emission from magnetars with IceCube (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1006

Searching for high-energy neutrinos from shock-interaction powered supernovae with the IceCube Neutrino Observatory (IceCube Collaboration, Massimiliano Lincetto (Ruhr U., Astron. Inst. and Munich, Tech. U.) et al.), PoS ICRC2023 (2023), 1105

D-Egg: a Dual PMT Optical Module for the IceCube Upgrade (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1082

Searching for High-energy Neutrino Emission from Seyfert Galaxies in the Northern Sky with IceCube (IceCube Collaboration, R. Abbasi (Loyola U., Chicago) et al.), PoS ICRC2023 (2023), 1052

Search for neutrino sources from the direction of IceCube alert events (IceCube Collaboration, Martina Karl et al.), PoS ICRC2023 (2023), 974

Design and Performance of the mDOM Mainboard for the IceCube Upgrade (IceCube Collaboration, Tyler Anderson et al.), PoS ICRC2023 (2023), 967

An improved infrastructure for the IceCube realtime system (IceCube Collaboration, Massimiliano Lincetto (Ruhr U., Astron. Inst. and Munich, Tech. U.) et al.), PoS ICRC2023 (2023), 1106

Galactic Core-Collapse Supernovae at IceCube: “Fire Drill” Data Challenges and follow-up (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1111

Shower angular resolution in IceCube-Gen2 and implications on diffuse science (IceCube-Gen2 Collaboration, Lu Lu et al.), PoS ICRC2023 (2023), 1188

Characterization and testing of the IceCube Upgrade mDOM (IceCube Collaboration, Sarah Mechbal (DESY, Zeuthen) et al.), PoS ICRC2023 (2023), 1183

Searching for Decoherence from Quantum Gravity at the IceCube South Pole Neutrino Observatory (IceCube Collaboration, R. Abbasi (Loyola U., Chicago) et al.), PoS ICRC2023 (2023), 1380

Search for quantum gravity using astrophysical neutrino flavour with IceCube (IceCube Collaboration, Carlos Argüelles et al.), PoS ICRC2023 (2023), 1225

Search for the rare interactions of neutrinos from distant point sources with the IceCube Neutrino Telescope (IceCube Collaboration, Woosik Kang (Sungkyunkwan U. and Munich, Tech. U.) et al.), PoS ICRC2023 (2023), 1380

Search for Dark Matter annihilation in the center of the Earth with IceCube (IceCube Collaboration, Juan Antonio Aguilar Sanchez et al.), PoS ICRC2023 (2023), 1393

Indirect dark matter search in the Galactic Centre with IceCube (IceCube Collaboration, Nhan Thien Chau (Brussels U.) et al.), PoS ICRC2023 (2023), 1394

Search for Dark Matter Decay in Nearby Galaxy Clusters and Galaxies with IceCube (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1378

Enhanced Starting Track Realtime Stream for IceCube (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1464

Development of an IceCube realtime alert using multiplet signal for optical follow-up (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1467

Searching for IceCube sub-TeV neutrino counterparts to sub-threshold Gravitational Wave events (IceCube Collaboration, Rasha Abbasi et al.), PoS ICRC2023 (2023), 1504

Searches for IceCube Neutrinos Coincident with Gravitational Wave Events (IceCube Collaboration, Aswathi Balagopal V et al.), PoS ICRC2023 (2023), 1484

2021 – Berlin, Germany (Online)

IceCube Collaboration individuals posted their talks to: arXiv:2107.06966

IceCube-Gen2 Collaboration individuals posted their talks to: arXiv:2107.06968

Searching for Dark Matter from the Sun with the IceCube Detector (IceCube Collaboration, Abbasi et al), PoS 020 (ICRC 2021)

A Time-Variability Test for Candidate Neutrino Sources Observed with IceCube (IceCube Collaboration, P. Dave et al.), PoS 1141 (ICRC 2021)

Searching for VHE gamma-ray emission associated with IceCube neutrino alerts using FACT, H.E.S.S., MAGIC, and VERITAS (VERITAS, MAGIC, IceCube, H.E.S.S., FACT collaborations, K. Satalecka et al.), PoS 960 (ICRC 2021)

Studies of a muon-based mass sensitive parameter for the IceTop surface array (IceCube Collaboration, D. Kang et al.), PoS 312 (ICRC 2021)

Update on the Combined Analysis of Muon Measurements from Nine Air Shower Experiments (EAS-MSU, IceCube, KASCADE-Grande, NEVOD-DECOR, Pierre Auger, SUGAR, Telescope Array, Yakutsk EAS Array collaborations, D. Soldin et al.), PoS 349 (ICRC 2021)

Cosmic-Ray Studies with the Surface Instrumentation of IceCube (IceCube Collaboration, A. Haungs et al.), PoS 336 (ICRC 2021)

The Acoustic Module for the IceCube Upgrade (IceCube Collaboration, J. Borowka et al.), PoS 1059 (ICRC 2021)

Hybrid cosmic ray measurements using the IceAct telescopes in coincidence with the IceCube and IceTop detectors (IceCube Collaboration, T. Bretz et al.), PoS 276 (ICRC 2021)

POCAM in the IceCube Upgrade (IceCube Collaboration, N. Khera, Nikhita, F. Henningsen et al.), PoS 1049 (ICRC 2021)

IceCube's response to supernovae and periodic features in the count rates (IceCube Collaboration, A. Fritz, D. Kappesser et al.), PoS SN1 (ICRC 2021)

Performance of the D-Egg Optical Sensor for the IceCube Upgrade (IceCube Collaboration, C. Hill et al.), PoS 1042 (ICRC 2021)

Multimessenger NuEM Alerts with AMON (HAWC, IceCube, ANTARES, AMON Group collaborations, H. Ayala et al.), PoS 958 (ICRC 2021)

Measuring the Neutrino Cross Section Using 8 years of Upgoing Muon Neutrinos Observed with IceCube (IceCube Collaboration, S. Robertson et al.), PoS 1158 (ICRC 2021)

Testing the Pointing of IceCube using the Moon Shadow in Cosmic-Ray Induced Muons (IceCube Collaboration, S. Philippen, T. Glüsenkamp, S. Schindler et al.), PoS 1087 (ICRC 2021)

Searching for neutrino transients below 1 TeV with IceCube (IceCube Collaboration, M. Larson, J. Koskinen, A. Pizzuto, J. Vandenbroucke et al.), PoS 1131 (ICRC 2021)

Characterization of the PeV astrophysical neutrino energy spectrum with IceCube using down-going tracks (IceCube Collaboration, Y. Lyu et al.), PoS 1137 (ICRC 2021)

Recent Progress in Solar Atmospheric Neutrino Searches with IceCube (IceCube Collaboration, J. Villarreal et al.), PoS 1174 (ICRC 2021)

Every Flare, Everywhere: An All-Sky Untriggered Search for Astrophysical Neutrino Transients Using IceCube Data (IceCube Collaboration, F. Lucarelli, W. Luszczak et al.), PoS 1128 (ICRC 2021)

Combining Maximum-Likelihood with Deep Learning for Event Reconstruction in IceCube (IceCube Collaboration, M. Huennefeld et al.), PoS 1065 (ICRC 2021)

Searching for time-dependent high-energy neutrino emission from X-ray binaries with IceCube (IceCube Collaboration, Q. Liu, A. Kheirandish et al.), PoS 1136 (ICRC 2021)

Completing Aganta Kairos: Capturing Metaphysical Time on the Seventh Continent (IceCube Collaboration, J. Madsen et al.), PoS 1381 (ICRC 2021)

Design, performance, and analysis of a measurement of optical properties of antarctic ice below 400 nm (IceCube Collaboration, J. Brostean-Kaiser et al.), PoS 1057 (ICRC 2021)

A Search for Neutrinos from Decaying Dark Matter in Galaxy Clusters and Galaxies with IceCube (IceCube Collaboration, M. Jeong et al.), PoS 506 (ICRC 2021)

Towards Equitable, Diverse, and Inclusive science collaborations: The Multimessenger Diversity

Network (IceCube Collaboration, E. Bechtol et al.), PoS 1383 (ICRC 2021)

Reconstruction of Neutrino Events in IceCube using Graph Neural Networks IceCube (IceCube Collaboration, M. Minh et al.), PoS 1044 (ICRC 2021)

Gravitational Wave Follow-Up Using Low Energy Neutrinos in IceCube DeepCore (IceCube Collaboration, A. Balagopal V., R. Hussain, A. Pizzuto et al.), PoS 939 (ICRC 2021)

Reconstructing Neutrino Energy using CNNs for GeV Scale IceCube Events (IceCube Collaboration, J. Brostean-Kaiser et al.), PoS 1053 (ICRC 2021)

Design and performance of the multi-PMT optical module for IceCube Upgrade (IceCube Collaboration, T. Anderson et al.), PoS 1070 (ICRC 2021)

Indirect search for dark matter in the Galactic Centre with IceCube (IceCube Collaboration, N. Iovine, J. Aguilar et al.), PoS 524 (ICRC 2021)

Discrimination of Muons for Mass Composition Studies of Inclined Air Showers Detected with IceTop (IceCube Collaboration, A. Balagopal V. et al.), PoS 212 (ICRC 2021)

Design of a Robust Fiber Optic Communications System for Future IceCube Detectors (IceCube Collaboration, R. Halliday et al.), PoS 2017 (ICRC 2021)

Camera Calibration for the IceCube Upgrade and Gen2 (IceCube Collaboration, W. Kang et al.), PoS 1064 (ICRC 2021)

Neutrino Education, Outreach, and Communications Activities: Captivating Examples from IceCube (IceCube Collaboration, J. Argueta, E. Bechtol, J. Madsen, M. O'Keefe, K. Shirey et al.), PoS 1382 (ICRC 2021)

Deployment of the IceCube Upgrade Camera System in the SPICEcore hole (IceCube Collaboration, C. Toennis et al.), PoS 1047 (ICRC 2021)

Constraining non-standard Dark Matter-Nucleon Interactions with IceCube (IceCube Collaboration, L. Peters, K. Choi, M. Nisa et al.), PoS 522 (ICRC 2021)

Search for secluded dark matter with 6 years of IceCube data (IceCube Collaboration, C. Toennis et al.), PoS 521 (ICRC 2021)

New Flux Limits in the Low Relativistic Regime for Magnetic Monopoles at IceCube (IceCube Collaboration, F. Lauber et al.), PoS 534 (ICRC 2021)

Design of an Efficient, High-Throughput Photomultiplier Tube Testing Facility for the IceCube Upgrade (IceCube Collaboration, L. Halve et al.), PoS 1056 (ICRC 2021)

A calibration study of local ice and optical sensor properties in IceCube (IceCube Collaboration, D. Chirkin et al.), PoS 1023 (ICRC 2021)

A time-independent search for neutrinos from galaxy clusters with IceCube (IceCube Collaboration, M. Nisa, A. Ludwig et al.), PoS 1133 (ICRC 2021)

The Wavelength-shifting Optical Module (WOM) for the IceCube Upgrade (IceCube Collaboration, J. Rack-Helleis), PoS 1038 (ICRC 2021)

A Combined Fit of the Diffuse Neutrino Spectrum using IceCube Muon Tracks and Cascades (IceCube Collaboration E. Ganster, R. Naab, Z. Zhang et al.), PoS 1129 (ICRC 2021)

Development of a scintillation and radio hybrid detector array at the South Pole (IceCube Collaboration, M. Oehler, R. Turcotte-Tardif et al.), PoS 225 (ICRC 2021)

The Surface Array Planned for IceCube-Gen2 (IceCube-Gen2 Collaboration, F. Schroeder et al.), PoS 407 (ICRC 2021)

Simulation Study for the Future IceCube-Gen2 Surface Array (IceCube-Gen2 Collaboration, A. Leszczyńska, M. Weyrauch, A. Coleman et al.), PoS 411 (ICRC 2021)

Performance Studies for a Next-Generation Optical Sensor for IceCube-Gen2 (IceCube-Gen2 Collaboration, N. Shimizu, A. Ishihara, A. Kappes et al.), PoS 1041 (ICRC 2021)

A Next-Generation Optical Sensor for IceCube-Gen2 (IceCube-Gen2 Collaboration, V. Basu, A. Ishihara, M. Dittmer, N. Shimizu et al.), PoS 1062 (ICRC 2021)

Observation of Cosmic Ray Anisotropy with Nine years of IceCube Data (IceCube Collaboration, F. McNally, R. Abbasi, P. Desiati, J. Diaz-Velez, T. Aguado, K. Gruchot, A. Moy, A. Simmons, A. Thorpe, H. Woodward), PoS 320 (ICRC 2021)

Multi-messenger searches via IceCube's high-energy neutrinos and gravitational-wave detections of LIGO/Virgo (IceCube Collaboration, D. Veske, R. Hussain, Z. Márka, S. Countryman, A. Pizzuto, Y. Asali, A. Oliveira, J. Vandenbroucke, et al.), PoS 950 (ICRC 2021)

Density of GeV Muons Measured with IceTop (IceCube Collaboration, D. Soldin et al.), PoS 342 (ICRC 2021)

Testing Hadronic Interaction Models with Cosmic Ray Measurements at the IceCube Neutrino Observatory (IceCube Collaboration, S. Verpoest et al.), PoS 357 (ICRC 2021)

Search for Astrophysical Neutrino Transients with IceCube DeepCore (IceCube Collaboration, C. Chen, Chujie, P. Dave, Pranav, I. Taboada et al.), PoS 1143 (ICRC 2021)

Searching for High-Energy Neutrinos from Core-Collapse Supernovae with IceCube (IceCube Collaboration, J. Necker et al.), PoS 1116 (ICRC 2021)

Seasonal Variations of the Unfolded Atmospheric Neutrino Spectrum with IceCube (IceCube Collaboration, K. Hymon et al.), PoS 1159 (ICRC 2021)

Realtime follow-up of astrophysical transients with the IceCube Neutrino Observatory (IceCube Collaboration, A. Pizzuto, A. Desai, R. Hussain et al.), PoS 952 (ICRC 2021)

Measuring total neutrino cross section with IceCube at intermediate energies (∼100 GeV to a few TeV) (IceCube Collaboration, S. Nowicki et al.), PoS 1132 (ICRC 2021)

Study of mass composition of cosmic rays with IceTop and IceCube (IceCube Collaboration, P. Koundal, M. Plum, J. Saffer et al.), PoS 323 (ICRC 2021)

Searches for and Characterization of Astrophysical Neutrinos using Starting Track Events in IceCube (IceCube Collaboration, S. Mancina, M. Silva et al.), PoS 1130 (ICRC 2021)

The SkyLLH framework for IceCube point-source search (IceCube Collaboration, T. Kontrimas, M. Wolf et al.), PoS 1073 (ICRC 2021)

A Search for Neutrino Sources with Cascade Events in IceCube (IceCube Collaboration, S. Sclafani, M. Hünnefeld et al.), PoS 1150 (ICRC 2021)

A New Search for Neutrino Point Sources with IceCube (IceCube Collaboration, C. Bellenghi, T. Glauch, C. Haack, T. Kontrimas, H. Niederhausen, R. Riemann, M. Wolf et al.), PoS 1138 (ICRC 2021)

A novel microstructure-based model to explain the IceCube ice anisotropy (IceCube Collaboration, M. Rongen, D. Chirkin et al.), PoS 1119 (ICRC 2021)

Simulation Study of the Observed Radio Emission of Air Showers by the IceTop Surface Extension (IceCube Collaboration, A. Coleman et al.), PoS 317 (ICRC 2021)

Studies of systematic uncertainty effects on IceCube's real-time angular uncertainty (IceCube Collaboration, C. Gualda, Y. Ashida, A. Sharma, H. Thomas et al.), PoS 1045 (ICRC 2021)

Search for high-energy neutrino sources from the direction of IceCube alert events (IceCube Collaboration, M. Karl, P. Eller, A. Schubert et al.), PoS 940 (ICRC 2021)

Searches for Neutrinos from Precursors and Afterglows of Gamma-Ray Bursts using the IceCube Neutrino Observatory (IceCube Collaboration, K. Deoskar, P. Coppin, E. Friedman et al.), PoS 1118 (ICRC 2021)

First air-shower measurements with the prototype station of the IceCube surface enhancement (IceCube Collaboration, H. Dujmovic, A. Coleman, M. Oehler et al.), PoS 314 (ICRC 2021)

Search for high-energy neutrino emission from hard X-ray AGN with IceCube (IceCube Collaboration, S. Goswami et al.), PoS 1142 (ICRC 2021)

IceCube Search for High-Energy Neutrinos from Ultra-Luminous Infrared Galaxies (IceCube Collaboration, P. Correa, K. de Vries, N. van Eijndhoven et al.), PoS 1115 (ICRC 2021)

Searching for High Energy Neutrinos from Magnetars with IceCube (IceCube Collaboration, A. Ghadimi, M. Santander et al.), PoS 1135 (ICRC 2021)

Analysis framework for multi-messenger astronomy with IceCube (IceCube Collaboration, J. Evans, K. Fan, M. Larson et al.), PoS 1098 (ICRC 2021)

End-to-End Test of the Sensitivity of IceCube to the Neutrino Burst from a Core-Collapse Supernova (IceCube Collaboration, S. Griswold et al.), PoS 1085 (ICRC 2021)

A model-independent analysis of neutrino flares detected in IceCube from X-ray selected

blazars (IceCube Collaboration, A. Sharma, E. O'Sullivan et al.), PoS 971 (ICRC 2021)

Testing the AGN Radio and Neutrino correlation using the MOJAVE catalog and 10 years of IceCube Data (IceCube Collaboration, A. Desai, J. Vandenbroucke, A. Pizzuto et al.), PoS 949 (ICRC 2021)

Direction Reconstruction using a CNN for GeV-Scale Neutrinos in IceCube (IceCube Collaboration, S. Yu et al.), PoS 1054 (ICRC 2021)

Results from IceCube (IceCube Collaboration, D. Williams et al.), PoS 016 (ICRC 2021)

Search for dark matter from the center of the Earth with 8 years of IceCube data (IceCube Collaboration, G. Renzi et al.), PoS 526 (ICRC 2021)

IceCube Search for Earth-traversing ultra-high energy Neutrinos (IceCube Collaboration, I. Safa, C. Arguelles et al.), PoS 1170 (ICRC 2021)

Stau Search in IceCube (IceCube Collaboration, J. Schmidt-Dencker et al.), PoS 1117 (ICRC 2021)

A Posterior Analysis on IceCube Double Pulse Tau Neutrino Candidates (IceCube Collaboration, W. Tian et al.), PoS 1146 (ICRC 2021)

Sensitivity Studies for the IceCube-Gen2 Radio Array (IceCube-Gen2 Collaboration, S. Hallmann, B. Clark, C. Glaser, D. Smith et al.), Pos 1183 (ICRC 2021)

Optimization of the Optical Array Geometry for IceCube-Gen2 (IceCube-Gen2 Collaboration, A. Omeliukh et al.), Pos 1184 (ICRC 2021)

Simulation and Sensitivities for a Phased IceCube-Gen2 Deployment (IceCube-Gen2 Collaboration, B. Clark, R. Halliday et al.), Pos 1186 (ICRC 2021)

Concept Study of a Radio Array Embedded in a Deep Gen2-like Optical Array (IceCube-Gen2 Collaboration, A. Bishop, L. Lu, A. Karle, B. Hokanson-Fasig et al.), Pos 1182 (ICRC 2021)

Searching for Dark Matter Neutrino Scattering in the Galactic Centre with IceCube (IceCube Collaboration, A. McMullen et al.), PoS 569 (ICRC 2021)

Search for correlations of high-energy neutrinos and ultra-high energy cosmic rays (IceCube, Pierre Auger, Telescope Array, ANTARES collaborations, A. Barbano et al.), PoS 842 (ICRC 2021)

Working Group Report on the Combined Analysis of Muon Density Measurements from Eight Air Shower Experiments (EAS-MSU, IceCube, KASCADE Grande, NEVOD-DECOR, Pierre Auger, SUGAR, Telescope Array, Yakutsk EAS Array collaborations, L. Cazon et al.), PoS 214 (ICRC 2021)

A novel method of rejecting muon backgrounds for the detection of the highest energy neutrinos (IceCube Collaboration, L. Lu, C. Haack, T. Yuan et al.), PoS 945 (ICRC 2021)

Search for dark matter annihilation in the center of the Earth with 8 years of IceCube data

(IceCube Collaboration, R. Abbasi et al.), PoS 541 (ICRC 2021)

2019 – Madison, Wisconsin

Individuals posted their talks to: arxiv.org/abs/1907.11699

Recent Results of Cosmic-Ray Measurements from IceCube and IceTop (IceCube Collaboration, Soldin *et al.*), PoS 014 (ICRC2019)

Results from IceCube (IceCube Collaboration, Williams *et al.*), PoS 016 (ICRC2019)

Search for Neutrinos in IceCube from the Local Anisotropic Universe using 2MRS (IceCube Collaboration, Sclafani *et al.*), PoS 1006 (ICRC2019)

Recent Results for All-Sky Time-Integrated Point Source Searches Using 10 yrs of IceCube Data (IceCube Collaboration, Carver *et al.*), PoS 851 (ICRC2019)

The Next Generation of IceCube Realtime Neutrino Alerts (IceCube Collaboration, Tung et al.), PoS 1021 (ICRC2019)

IceCube Search for Galactic Neutrino Sources Based on HAWC Observations of the Galactic Plane (IceCube Collaboration, Kheirandish et al.), PoS 932 (ICRC2019)

Neutrino Source Searches and a Realtime Neutrino Alert Stream in the Southern Sky with IceCube Starting Tracks (IceCube Collaboration, Mancina et al.), PoS 954 (ICRC2019)

Searching for High-Energy Neutrino Emission from TeV Pulsar-Wind Nebulae (IceCube Collaboration, Liu et al.), PoS 944 (ICRC2019)

ANTARES-IceCube Combined Search for Neutrino Point Sources in the Southern Hemisphere (IceCube Collaboration, Illuminati et al.), PoS 919 (ICRC2019)

A Search for Counterparts to ANITA Neutrino Candidates with IceCube (IceCube Collaboration, Pizzuto et al.), PoS 981 (ICRC2019)

Search for Neutrino Emission in IceCube's Archival Data from the Direction of IceCube Alert Events (IceCube Collaboration, Karl et al.), PoS 929 (ICRC2019)

IceCube as a Multi-Messenger Follow-Up Observatory for Astrophysical Transients (IceCube Collaboration, Vandenbroucke et al.), PoS 1026 (ICRC2019)

Searching for Multi-Messenger Gravitational-Wave + High-Energy Neutrino Sources with Advanced LIGO, Virgo and IceCube (IceCube Collaboration, Keivani et al.), PoS 930 (ICRC2019)

Constraining anomalous EeV ANITA detections with PeV neutrinos (IceCube Collaboration, Safa et al.), PoS 995 (ICRC2019)

Searching for Common Sources of Gravitational Waves and Neutrinos (IceCube Collaboration, Hussain et al.), PoS 918 (ICRC2019)

Searching for Time-Dependent Neutrino Emission from Blazars (IceCube Collaboration, O'Sullivan et al.), PoS 973 (ICRC2019)

Search for High-Energy Neutrinos from Populations of Optical Transients (IceCube Collaboration, Stein et al.), PoS 1016 (ICRC2019)

Search for High-Energy Neutrinos from AGN Cores (IceCube Collaboration, Bradascio et al.), PoS 845 (ICRC2019)

AMON: TeV Gamma and TeV Neutrino Coincidence Alerts from HAWC and IceCube Subthreshold Data (IceCube Collaboration, Ayala et al.), PoS 841 (ICRC2019)

IceCube Results and Limits on the Neutrino Production from 3FHL Blazars Using 8 yrs of Through-Going Muon Data from the Northern Hemisphere [poster] (IceCube Collaboration, M. Huber et al.), PoS 916 (ICRC2019)

A Method for an Untriggered, Time-Dependent, Source-Stacking Search for Neutrino Flares [poster] (IceCube Collaboration, Luszczak et al.), PoS 950 (ICRC2019)

A Catalog of Astrophysical Neutrino Candidates for IceCube [poster] (IceCube Collaboration, Chen et al.), PoS 852 (ICRC2019)

IceCube Search for High-Energy Neutrinos Produced in the Precursor Stages of Gamma-Ray Bursts [poster] (IceCube Collaboration, Coppin et al.), PoS 859 (ICRC2019)

Searches for Neutrinos from Fast Radio Bursts with IceCube [poster] (IceCube Collaboration, Pizzuto et al.), PoS 982 (ICRC2019)

SkyLLH – A Generalized Python-based Tool for Log-likelihood Analyses in Multi-messenger Astronomy [poster] (IceCube Collaboration, Wolf et al.), PoS 1035 (ICRC2019)

Investigation of Ultra-Luminous Infrared Galaxies as Obscured High-Energy Neutrino Source Candidates [poster] (IceCube Collaboration, Correa et al.), PoS 860 (ICRC2019)

Neutrinos from Primordial Black Hole Bursts [poster] (IceCube Collaboration, Dave et al.), PoS 863 (ICRC2019)

Searching for Neutrino Emission from Hard X-Ray Sources with IceCube [poster] (IceCube Collaboration, Santander et al.), PoS 1002 (ICRC2019)

Search for Correlations of High-Energy Neutrinos and Ultra–High-Energy Cosmic Rays (ANTARES, IceCube, Auger and Telescope Array collaborations, Barbano et al.), PoS 842 (ICRC2019)

Measurement of the Diffuse Astrophysical Muon Neutrino Spectrum with 10 yrs of IceCube Data (IceCube Collaboration, Stettner et al.), PoS 1017 (ICRC2019)

Measurement of the High-Energy All-Flavor Neutrino-Nucleon Cross-Section with IceCube (IceCube Collaboration, Yuan et al.), PoS 1040 (ICRC2019)

Unfolding the True Atmospheric Neutrino Event Rate in the 1Gev -- 1Tev Range Using IceCube/DeepCore (IceCube Collaboration, Sandroos et al.), PoS 999 (ICRC2019)

First Double-Cascade Tau Neutrino Candidates in IceCube & a New Measurement of the Flavor Composition (IceCube Collaboration, Stachurska et al.), PoS 1015 (ICRC2019)

Model-Independent Measurement of the Atmospheric Muon Neutrino Energy Spectrum up to 2.5 PeV (IceCube Collaboration, Hoinka et al.), PoS 912 (ICRC2019)

Characterization of the Astrophysical Diffuse Neutrino Flux with High-Energy Starting Events and Prospects for Future Measurements with IceCube (IceCube Collaboration, Schneider et al.), PoS 1004 (ICRC2019)

Astrophysical Tau Neutrino Identification with IceCube Waveforms (IceCube Collaboration, Wille et al.), PoS 1036 (ICRC2019)

A Novel Method of Rejecting Muon Backgrounds for the Detection of the Highest-Energy Neutrinos [poster] (IceCube Collaboration, Lu et al.), PoS 945 (ICRC2019)

Search for Astrophysical Tau Neutrinos with an Improved Double-Pulse Method [poster] (IceCube Collaboration, Soedingrekso et al.), PoS 960 (ICRC2019)

Measurement of the Multi-TeV Neutrino Cross-Section with IceCube Using Earth Absorption [poster] (IceCube Collaboration, Robertson et al.), PoS 990 (ICRC2019)

Measurement of the Diffuse Muon Neutrino Flux Using Starting-Track Events in IceCube [poster] (IceCube Collaboration, Robertson et al.), PoS 1010 (ICRC2019)

Constraints on Light Meson Production in Air Showers with Atmospheric Neutrinos Below 1 TeV Interacting in IceCube's DeepCore [poster] (IceCube Collaboration, Robertson et al.), PoS 882 (ICRC2019)

IceTop as Veto for IceCube: Results (IceCube Collaboration, Tosi, Pandya et al.), PoS 445 (ICRC2019)

The Scintillator Upgrade of IceTop: Performance of the Prototype Array (IceCube Collaboration, Kauer et al.), PoS 309 (ICRC2019)

IceAct, SiPM-Based Imaging Air Cherenkov Telescopes for IceCube (IceCube Collaboration, Schaufel, Andeen et al.), PoS 179 (ICRC2019)

Low-Energy Cosmic-Ray Spectrum from 250 TeV to 10 PeV using IceTop (IceCube Collaboration, Koirala et al.), PoS 318 (ICRC2019)

Studying the Temporal Variation of the Cosmic-Ray Sun Shadow Using IceCube Data (IceCube Collaboration, Tenholt, Desiati et al.), PoS 437 (ICRC2019)

Seasonal Variations of Atmospheric Neutrinos in IceCube (IceCube Collaboration, Tilav et al.), PoS 465 (ICRC2019)

International Cosmic Ray Conference (ICRC) Proceedings

Cosmic-Ray Spectrum and Composition from PeV to EeV from the IceCube Neutrino Observatory (IceCube Collaboration, Andeen et al.), PoS 172 (ICRC2019)

Working-Group Report on the Combined Analysis of Muon Density Measurements from Eight Leading Air-Shower Experiments (IceCube Collaboration, Soldin et al.), PoS 214 (ICRC2019)

A Three-Dimensional Reconstruction of Cosmic-Ray Events in IceCube [poster] (IceCube Collaboration, Bai, Dvorak et al.), PoS 244 (ICRC2019)

Seasonal Variations of Atmospheric Muons in IceCube [poster] (IceCube Collaboration, Tilav et al.), PoS 894 (ICRC2019)

Simulation and Reconstruction Study of Surface Scintillator Array at the IceCube Observatory [poster] (IceCube Collaboration, Leszczyńska, Plum et al.), PoS 332 (ICRC2019)

Science Case of a Scintillator and Radio Surface Array at IceCube [poster] (IceCube Collaboration, Schröder et al.), PoS 418 (ICRC2019)

First Measurements of Prototype Radio Antennas for the IceTop Detector Array [poster] (IceCube Collaboration, Renschler et al.), PoS 401 (ICRC2019)

Cosmic-Ray Composition Study Using Machine Learning at the IceCube Neutrino Observatory [poster] (IceCube Collaboration, Plum et al.), PoS 394 (ICRC2019)

Probing Neutrino Emission at GeV Energies from Compact Binary Mergers with IceCube (IceCube Collaboration, de Wasseige et al.), PoS 865 (ICRC2019)

First Search for GeV Neutrinos from Bright Gamma-Ray Solar Flares Using the IceCube Neutrino Observatory [poster] (IceCube Collaboration, de Wasseige et al.), PoS 1075 (ICRC2019)

Using SNOwGLoBES to Calculate Supernova Neutrino Detection Rates in IceCube Observatory [poster] (IceCube Collaboration, O'Sullivan et al.), PoS 975 (ICRC2019)

IceCube Supernova Search and Multi-Messenger Efforts [poster] (IceCube Collaboration, Fritz et al.), PoS 889 (ICRC2019)

Combined Search for Neutrinos from Dark-Matter Annihilation in the GC using ANTARES and IceCube (IceCube Collaboration, Iovine et al.), PoS 552 (ICRC2019)

Enabling a New Detection Channel for BSM Physics with *in-situ* Measurements of Ice Luminescence (IceCube Collaboration, Pollman et al.), PoS 983 (ICRC2019)

Quest for New Physics Using Astrophysical Neutrino Flavour in IceCube [poster] (IceCube Collaboration, Farrag et al.), PoS 879 (ICRC2019)

Search for a Dark-Matter Annihilation in the Center of the Earth with the IceCube Detector [poster] (IceCube Collaboration, Renzi et al.), PoS 541 (ICRC2019)

The search for dark matter with metastable mediators with the IceCube observatory [poster] (IceCube Collaboration, Tönnis et al.), PoS 548 (ICRC2019)

Dark-Matter Searches with the IceCube Upgrade [poster] (IceCube Collaboration, Baur et al.), PoS 506 (ICRC2019)

Solar WIMP Annihilation Search with IceCube [poster] (IceCube Collaboration, Lazar, Liu et al.), PoS 527 (ICRC2019)

Searches for Connections Between Dark Matter and Neutrinos with the IceCube High-Energy Starting-Event Sample IceCube [poster] (IceCube Collaboration, Djumović, Argüelles et al.), PoS 839 (ICRC2019)

Light Diffusion in Birefringent Polycrystals and the IceCube Ice Anisotropy (IceCube Collaboration, Chirkin, Rongen et al.), PoS 839 (ICRC2019)

The POCAM as Self-Calibrating Light Source for the IceCube Upgrade [poster] (IceCube Collaboration, Henningsen et al.), PoS 908 (ICRC2019)

Calibration LEDs in the IceCube Upgrade D-Egg Modules [poster] (IceCube Collaboration, Kiriki et al.), PoS 923 (ICRC2019)

The Camera System for the IceCube Upgrade [poster] (IceCube Collaboration, Kiriki et al.), PoS 923 (ICRC2019)

The SpiceCore Hole Camera System [poster] (IceCube Collaboration, Jeong, Tönnis et al.), PoS 926 (ICRC2019)

Improving the Muon-Track Reconstruction of IceCube [poster] (IceCube Collaboration, Bradascio et al.), PoS 846 (ICRC2019)

Application of Deep Neural Networks to Event-Type Classification in IceCube [poster] (IceCube Collaboration, Kronmüller et al.), PoS 257 (ICRC2019)

Capturing Cosmic-Ray Research and Researchers with Art (IceCube Collaboration, Madsen et al.), PoS 951 (ICRC2019)

Synergy between Art and Science: Collaboration at the South Pole [poster] (IceCube Collaboration, Fortescue et al.), PoS 867 (ICRC2019)

The IceCube Upgrade - Design and Science Goals (IceCube Collaboration, Ishihara et al.), PoS 1031 (ICRC2019)

A Multi-PMT Optical Module for the IceCube Upgrade [poster] (IceCube Collaboration, Classen et al.), PoS 855 (ICRC2019)

Electronics Development for the New Photo-Detectors (PDOM and D-Egg) for IceCube Upgrade [poster] (IceCube Collaboration, Nagai et al.), PoS 966 (ICRC2019)

Design and Performance of a UV-Calibration Device for the SpiceCore Hole [poster] (IceCube Collaboration, Brostean-Kaiser et al.), PoS 847 (ICRC2019)

An Acoustic Calibration System for the IceCube Upgrade [poster] (IceCube Collaboration, Weibusch et al.), PoS 1030 (ICRC2019)

Characterization of Two PMT Models for the IceCube Upgrade mDOM [poster] (IceCube Collaboration, van Eijk et al.), PoS 1022 (ICRC2019)

2017 – Busan, South Korea

*IceCube Collaboration contributions to the 2017 ICRC are grouped together on astro-ph.HE/ and .IM in 6 distinct files. Part I – Point source searches – astro-ph.HE/*1710.01179*; II – Atmospheric and astrophysical diffuse neutrino searches of all flavors – astro-ph.HE/; 1710.01191; III - Cosmic rays – astro-ph.HE/1710.01194; IV – Dark matter and exotic particles – astro-ph.HE/1710.01197; V – Neutrino oscillations and supernova searches – astro-ph.HE/1710.01201; and IceCube-Gen2 - astro-ph.IM/1710.01207*

Combined Analysis of Cosmic-Ray Anisotropy with IceCube and HAWC (IceCube Collaboration, Díaz-Vélez *et al.*), PoS 539 (ICRC2017); astro-ph.HE/1708.03005

Search for PeV Gamma-Ray Point Sources with IceCube (IceCube Collaboration, Griffith *et al.*), PoS 715 (ICRC2017); astro-ph.HE/1710.01194, p. 6

Search for Diffuse Gamma-Ray Emission from the Galactic Plane with IceCube (IceCube Collaboration, Pandya *et al.*), PoS 705 (ICRC2017); astro-ph.HE/1710.01194, p. 14

A Composition-Sensitive Log-Likelihood Ratio for Cosmic Rays and Gamma Rays (IceCube Collaboration, Pandya *et al.*), PoS 514 (ICRC2017); astro-ph.HE/1710.01194, p. 22 (poster)

Cosmic-Ray Anisotropy with 7 Years of Data from IceCube and IceTop (IceCube Collaboration, Bourbeau *et al.*), PoS 474 (ICRC2017); astro-ph.HE/1710.01194, p. 30 (poster)

Sensitivity of IceCube Cosmic-Ray Measurements to the Hadronic Interaction Models (IceCube Collaboration, De Ridder *et al.*), PoS 319 (ICRC2017); astro-ph.HE/1710.01194, p. 38 (poster)

GeV Solar Energetic Particle Observation and Search by IceTop from 2011 to 2016 (IceCube Collaboration, Evenson *et al.*), PoS 132 (ICRC2017); astro-ph.HE/1710.01194, p. 46 (poster)

Impulsive Increase of Galactic Cosmic-Ray Flux Observed by IceTop (IceCube Collaboration, Evenson *et al.*), PoS 133 (ICRC2017); astro-ph.HE/1710.01194, p. 54

Performance of IceTop as Veto for IceCube (IceCube Collaboration, Pandya *et al.*), PoS 967 (ICRC2017); astro-ph.HE/1710.01194, p. 61 (poster)

Solar Atmospheric Neutrino Search with IceCube (IceCube Collaboration, S. In *et al.*), PoS 965 (ICRC2017); astro-ph.HE/1710.01194, p. 69 (poster)

High-Energy Atmospheric Muons in IceCube and IceTop (IceCube Collaboration, Tenholt *et al.*), PoS 317 (ICRC2017); astro-ph.HE/1710.01194, p. 77 (poster)

Search for Astrophysical Tau Neutrinos in 6 Years of High-Energy Starting Events in IceCube (IceCube Collaboration, Usner *et al.*), PoS 974 (ICRC2017); astro-ph.HE/1710.01191, p. 6

Multi-Flavour PeV Neutrino Search with IceCube (IceCube Collaboration, Lu Lu *et al.*), PoS 1002 (ICRC2017); astro-ph.HE/1710.01191, p. 14

High-Energy Astrophysical Neutrino Flux Measurement Using Neutrino-Induced Cascades Observed in 4 Years of IceCube Data (IceCube Collaboration, Niederhausen *et al.*), PoS 968 (ICRC2017); astro-ph.HE/1710.01191, p. 22

A Measurement of the Diffuse Astrophysical Muon Neutrino Flux Using 8 Years of IceCube Data (IceCube Collaboration, Haack *et al.*), PoS 1005 (ICRC2017); astro-ph.HE/1710.01191, p. 30 (poster)

Characterizing the Flux of Atmospheric Neutrinos with IceCube-DeepCore (IceCube Collaboration, T. Wood *et al.*), PoS 1028 (ICRC2017); astro-ph.HE/1710.01191, p. 38

Measurement of High-Energy Neutrino–Nucleon Cross-Section and Astrophysical Neutrino Flux Anisotropy Study of Cascade Channel with IceCube (IceCube Collaboration, Y. Xu *et al.*), PoS 978 (ICRC2017); astro-ph.HE/1710.01191, p. 46 (poster)

Observation of Astrophysical Neutrinos in 6 Years of IceCube Data (IceCube Collaboration, Kopper *et al.*), PoS 981 (ICRC2017); astro-ph.HE/1710.01191, p. 54

All-Flavor Multi-Channel Analysis of the Astrophysical Neutrino Spectrum with IceCube (IceCube Collaboration, Weaver *et al.*), PoS 976 (ICRC2017); astro-ph.HE/ 1710.01191, p. 62

Differential Limit on an EHE Neutrino-Flux Component in the Presence of Astrophysical Background from 9 Years of IceCube Data (IceCube Collaboration, Yoshida *et al.*), PoS 975 (ICRC2017); astro-ph.HE/1710.01191, p. 70

Improving Future High-Energy Tau-Neutrino Searches in IceCube (IceCube Collaboration, Usner *et al.*), PoS 973 (ICRC2017); astro-ph.HE/1710.01191, p. 78 (poster)

Search for Astrophysical Tau Neutrinos with the IceCube Waveforms (IceCube Collaboration, Wille *et al.*), PoS 1009 (ICRC2017); astro-ph.HE/1710.01191, p. 86

Delayed Light Emission to Distinguish Astrophysical Neutrino Flavors in IceCube (IceCube Collaboration, Steuer *et al.*), PoS 1008 (ICRC2017); astro-ph.HE/1710.01197, p. 6 (poster)

Search for Signatures of Heavy Decaying Dark Matter with IceCube (IceCube Collaboration, Stettner *et al.*), PoS 923 (ICRC2017); astro-ph.HE/1710.01197, p. 14

Latest Results and Sensitivities for Solar Dark Matter Searches with IceCube (IceCube Collaboration, S. In *et al.*), PoS 912 (ICRC2017); astro-ph.HE/1710.01197, p. 22 (poster)

Searches for Annihilating Dark Matter in the Milky Way Halo with IceCube (IceCube Collaboration, Flis *et al.*), PoS 906 (ICRC2017); astro-ph.HE/1710.01197, p. 30

Searches for Dark Matter in the Center of the Earth with the IceCube Detector (IceCube Collaboration, Ansseau *et al.*), PoS 896 (ICRC2017); astro-ph.HE/1710.01197, p. 38 (poster)

Measurement of Water Luminescence – A New Detection Method for Neutrino Telescopes (IceCube Collaboration, Pollman *et al.*), PoS 1060 (ICRC2017); astro-ph.HE/1710.01197, p. 46 (poster)

Combined Search for Neutrinos from Dark-Matter Annihilation in the Galactic Center using IceCube and ANTARES (IceCube and ANTARES collaborations, Aguilar *et al.*), PoS 911 (ICRC2017); astro-ph.HE/1710.01197, p. 54 (poster)

Search for Point-Like Sources in the Astrophysical Muon Neutrino Flux with IceCube (IceCube Collaboration, Reimann *et al.*), PoS 997 (ICRC2017); astro-ph.HE/ 1710.01179, p. 7 (poster)

Search for Weak Neutrino Point Sources Using Angular Auto-Correlation Analyses in IceCube (IceCube Collaboration, Glauch *et al.*), PoS 1014 (ICRC2017); astro-ph.HE/ 1710.01179, p. 15 (poster)

Results of IceCube Searches for Neutrinos from Blazars Using 7 Years of Through-Going Muon Data (IceCube Collaboration, M. Huber *et al.*), PoS 994 (ICRC2017); astro-ph.HE/ 1710.01179, p. 31 (poster)

IceCube Search for Neutrinos from 1ES 1959+650: Completing the Picture (IceCube, FACT and MAGIC collaborations, Kintscher *et al.*), PoS 969 (ICRC2017); astro-ph.HE/1710.01179, p. 39 (poster)

Using All-Flavor and All-Sky Event Selections by IceCube to Search for Neutrino Emission from the Galactic Plane (IceCube Collaboration, Krings *et al.*), PoS 995 (ICRC2017); astro-ph.HE/ 1710.01179, p. 47 (poster)

Constraints on Diffuse Neutrino Emission from the Galactic Plane with 7 Years of IceCube Data (IceCube Collaboration, Haack *et al.*), PoS 1011 (ICRC2017); astro-ph.HE/1710.01179, p. 55

Search for Extended Sources of Neutrino Emission with 7 Years of IceCube Data (IceCube Collaboration, Pinat *et al.*), PoS 963 (ICRC2017); astro-ph.HE/1710.01179, p. 63 (poster)

Search for a Cumulative Neutrino Signal from Blazar Flares Using IceCube Data (IceCube Collaboration, Raab *et al.*), PoS 957 (ICRC2017); astro-ph.HE/1710.01179, p. 71 (poster)

Investigation of Obscured Flat Spectrum Radio AGN with the IceCube Neutrino Observatory (IceCube Collaboration, Maggi *et al.*), PoS 1000 (ICRC2017); astro-ph.HE/1710.01179, p. 79 (poster)

Realtime Neutrino Alerts and Follow-Up in IceCube (IceCube Collaboration, Blaufuss *et al.*), PoS 982 (ICRC2017); astro-ph.HE/1710.01179, p. 87 (poster)

Search for High-Energy Neutrino Emission from Fast Radio Bursts (IceCube Collaboration, D. Xu *et al.*), PoS 980 (ICRC2017); astro-ph.HE/1710.01179, p. 95

IceCube as a Neutrino Follow-Up Observatory for Astronomical Transients (IceCube Collaboration, Meagher *et al.*), PoS 1007 (ICRC2017); astro-ph.HE/1710.01179, p.103

Search for GeV Neutrinos Associated with Solar Flares with IceCube (IceCube Collaboration, Gwen de Wasseige *et al.*), PoS 1010 (ICRC2017); astro-ph.HE/1710.01201, p. 6

Estimating the Sensitivity of IceCube to Signatures of Axion Production in a Galactic Supernova (IceCube Collaboration, BenZvi *et al.*), PoS 892 (ICRC2017); astro-ph.HE/1710.01201, p. 14 (poster)

Searching for Arbitrary Low-Energy Neutrino Transients with IceCube (IceCube Collaboration, Cross *et al.*), PoS 936 (ICRC2017); astro-ph.HE/1710.01201, p. 22 (poster)

IceAct: Imaging Air Cherenkov Telescopes with SiPMs at the South Pole for IceCube-Gen2 (IceCube Gen2 collaboration, Auffenberg *et al.*), PoS 1055 (ICRC2017); astro-ph.HE/ 1710.01207, p. 14

Overview and Performance of the D-Egg Sensor for IceCube-Gen2 (IceCube Gen2 collaboration, Ishihara *et al.*), PoS 1051 (ICRC2017); astro-ph.HE/1710.01207, p. 69 (poster)

Muon Track Reconstruction and Veto Performance with the D-Egg Sensor for IceCube-Gen2 (IceCube Gen2 collaboration, Stößl *et al.*), PoS 1038 (ICRC2017); astro-ph.HE/1710.01207, p. 30 (poster)

In-Ice Self-Veto Techniques for IceCube-Gen2 (IceCube Gen2 collaboration, Luenemann *et al.*), PoS 945 (ICRC2017); astro-ph.HE/1710.01207, p. 38 (poster)

IceCube-Gen2: The Next-Generation Neutrino Observatory for the South Pole (IceCube Gen2 collaboration, van Santen *et al.*), PoS 991 (ICRC2017); astro-ph.HE/1710.01207, p. 6

A Camera System for IceCube-Gen2 (IceCube Gen2 collaboration, Jeong *et al.*), PoS 1040 (ICRC2017); astro-ph.HE/1710.01207, p. 46 (poster)

The mDom – A Multi-PMT Digital Optical Module for the IceCube-Gen2 Neutrino Telescope (IceCube Gen2 collaboration, Classen *et al.*), PoS 1047 (ICRC2017); astro-ph.HE/ 1710.01207, p. 54 (poster)

The IceTop Scintillator Upgrade (IceCube Gen2 collaboration, Kunwar *et al.*), PoS 401 (ICRC2017); astro-ph.HE/1710.01207, p. 62 (poster)

Overview and Performance of the Wavelength-Shifting Optical Module (WOM) (IceCube Gen2 collaboration, Peiffer *et al.*), PoS 1052 (ICRC2017); astro-ph.HE/1710.01207, p. 69 (poster)

The Precision Optical CAlibration Module for IceCube-Gen2: First Prototype (IceCube Gen2 collaboration, Resconi *et al.*), PoS 934 (ICRC2017); astro-ph.HE/1710.01207, p. 77 (poster)

Deep Learning in Physics Exemplified by the Reconstruction of Muon-Neutrino Events in IceCube (IceCube Collaboration, Hünnefeld *et al.*), PoS 1057 (ICRC2017); astro-ph.HE/1710.01201, p. 30 (poster)

Connecting Beyond the Research Community: IceCube Education, Outreach and Communication Efforts (IceCube Collaboration, Madsen *et al.*), PoS 1072 (ICRC2017); astro-ph.HE/1710.01201, p. 38 (poster)

GeV Solar Energetic Particle Observation and Search by IceTop from 2011 to 2016 (IceCube Collaboration, P-S Mangeard, et al.), PoS 132 (ICRC2017)

Impulsive Increase of Galactic Cosmic Ray Flux Observed by IceTop (IceCube Collaboration, P-S Mangeard, et al.), PoS 133 (ICRC2017)

Searching for VHE Gamma-Ray Emission Associated with IceCube Astrophysical Neutrinos Using FACT, H.E.S.S., MAGIC and VERITAS (VERITAS, FACT, IceCube and H.E.S.S. collaborations, Santander et al.), PoS 618 (ICRC2017); astro-ph.HE/1708.08945

All-Sky Search for Correlations in the Arrival Directions of Astrophysical Neutrino Candidates and Ultrahigh-Energy Cosmic Rays (IceCube, Auger and Telescope Array collaborations, Al Samarai, et al.), PoS 960 (ICRC2017); astro-ph.HE/1710.01179, p. 23

2015 – The Hague, Netherlands

IceCube Collaboration Contributions to the 2015 ICRC *are grouped together on astro-ph.HE/ and .IM in 6 distinct files. Part I – Point source searches – astro-ph.HE/1510.05222; II – Atmospheric and astrophysical diffuse neutrino searches of all flavors – 1510.05223; III - Cosmic rays – 1510.05225; IV – Dark matter and exotic particles – 1510.05226; V – Neutrino oscillations and supernova searches – 1510.05227; and IceCube-Gen2 – astro-ph.IM/1510.05228.*

Surface Muons in IceTop (IceCube Collaboration, Dembinski & Gonzalez *et al.*), PoS 267 (ICRC2015); astro-ph.HE/1510.05225 p. 21

Studying Cosmic Ray Composition with IceTop Using Muon and Electromagnetic Lateral Distributions *(poster)* (IceCube Collaboration, Gonzalez *et al.*), PoS 338 (ICRC2015); astro-ph.HE/1510.05225 p. 45

High p_T Muons from Cosmic Ray Air Showers in IceCube *(poster)* (IceCube Collaboration, Soldin *et al.*), PoS 256 (ICRC2015); astro-ph.HE/1510.05225 p. 13

A Function to Describe Attenuation of Cosmic Ray Air Shower Particles in Snow *(poster)* (IceCube Collaboration, Rawlins *et al.*), PoS 628 (ICRC2015); astro-ph.HE/1510.05225 p. 68

Latest Results on Cosmic Ray Spectrum and Composition from 3 Years of IceTop and IceCube (IceCube Collaboration, Rawlins *et al.*), PoS 334 (ICRC2015); astro-ph.HE/1510.05225 p. 37

Anisotropy in Cosmic-Ray Arrival Directions Using IceCube and IceTop (IceCube Collaboration, Westerhoff *et al.*), PoS 274 (ICRC2015); astro-ph.HE/1510.05225 p. 29

Search for High Energy Neutron Point Sources in IceTop (IceCube Collaboration, Sutherland *et al.*), PoS 250 (ICRC2015); astro-ph.HE/1510.05225 p. 5

IceTop as Veto for IceCube *(poster 2)* (IceCube Collaboration, Tosi & Jero *et al.*), PoS 1086 (ICRC2015); astro-ph.HE/1510.05225 p. 76

An IceTop Module for the IceCube MasterClass *(poster)* (IceCube Collaboration, Dembinski *et al.*), PoS 576 (ICRC2015); astro-ph.HE/1510.05225 p. 61

Full-Sky Analysis of Cosmic-Ray Anisotropy with IceCube and HAWC (IceCube and HAWC collaborations, Díaz-Vélez *et al.*), PoS 444 (ICRC2015); astro-ph.HE/ 1510.04134

A Measurement of the Diffuse Astrophysical Muon Neutrino Flux Using Multiple Years of IceCube Data (IceCube Collaboration, Rädel *et al.*), PoS 1079 (ICRC2015); astro-ph.HE/1510.05223 p. 37

A Search for Astrophysical Tau Neutrinos in 3 Years of IceCube Data (IceCube Collaboration, Williams *et al.*), PoS 1071 (ICRC2015); astro-ph.HE/1510.05223 p. 29

Unfolding Measurement of the Atmospheric Muon Spectrum Using IceCube-79/86 (IceCube Collaboration, Börner *et al.*), PoS 1098 (ICRC2015); astro-ph.HE/ 1510.05223 p. 53

A Search for Extremely High-Energy Neutrinos in 6 Years (of IceCube Data *(poster 3)* (IceCube Collaboration, Ishihara *et al.*), PoS 1064 (ICRC2015); astro-ph.HE/ 1510.05223 p. 13

Update of a Combined Analysis of the High-Energy Cosmic Neutrino Flux at the IceCube Detector (IceCube Collaboration, Mohrmann *et al.*), PoS 1066 (ICRC2015); astro-ph.HE/ 1510.05223 p. 21

Atmospheric Muon and Electron Neutrino Energy Spectrum from IceCube *(poster 2)* (IceCube Collaboration, Kuwabara *et al.*), PoS 1063 (ICRC2015); astro-ph.HE/1510.05223 p. 5

Observation of Astrophysical Neutrinos in 4 Years of IceCube Data *(poster 3)* (IceCube Collaboration, C. Kopper and Kurahashi-Neilson *et al.*), PoS 1081 (ICRC2015); astro-ph.HE/ 1510.05223 p. 45

High-Energy Astrophysical Neutrino Flux Characteristics for Neutrino-Induced Cascades Using IC79- & 86-String IceCube Configurations (IceCube Collaboration, Niederhausen *et al.*), PoS 1109 (ICRC2015); astro-ph.HE/1510.05223 p. 59

New Limit for Mildly Relativistic Magnetic Monopoles Obtained with IceCube (IceCube Collaboration, Obertacke *et al.*) PoS 1061 (ICRC2015); astro-ph.HE/1510.05226 p. 12

A Search for Dark Matter in the Centre of the Earth with the IceCube Neutrino Detector (IceCube Collaboration, Kunnen *et al.*), PoS 1205 (ICRC2015); astro-ph.HE/ 1510.05226 p. 33

Search for Dark Matter Annihilations in the Sun Using the Completed IceCube Neutrino Telescope (IceCube Collaboration, Rameez *et al.*), PoS 1209 (ICRC2015); astro-ph.HE/1510.05226 p. 41

Improved Methods for Solar Dark Matter Searches with the IceCube Neutrino Telescope (IceCube Collaboration, Zoll *et al.*), PoS 1099 (ICRC2015); astro-ph.HE/1510.05226 p. 17

All-Flavor Searches for Dark Matter with the IceCube Neutrino Observatory *(poster 3)* (IceCube Collaboration, Wiebe *et al.*), PoS 1224 (ICRC2015); astro-ph.HE/ 1510.05226 p. 65

Search for Gravitino Dark Matter Decay with IceCube *(poster 3)* (IceCube Collaboration, Pepper *et al.*), PoS 1051 (ICRC2015); astro-ph.HE/1510.05226 p. 5

Searching for Neutrinos from Dark Matter Annihilations in (Dwarf) Galaxies and Galaxy Clusters with IceCube *(poster 3)* (IceCube Collaboration, De With *et al.*), PoS 1215 (ICRC2015); astro-ph.HE/1510.05226 p. 57

Pull-Validation: A Resampling Method to Improve the Usage of Low-Statistics Datasets *(poster 3)* (IceCube Collaboration, Lünemann *et al.*), PoS 1211 (ICRC2015); astro-ph.HE/1510.05226 p. 49

Search for Neutrino-Induced Double Tracks as an Exotic Physics Signature in IceCube (IceCube Collaboration, S. Kopper *et al.*), PoS 1104 (ICRC2015); astro-ph.HE/ 1510.05226 p. 25

Medium-Energy (Few TeV – 100 TeV) Neutrino Point-Source Searches in the Southern Sky with IceCube *(poster 3)* (IceCube Collaboration, Altmann *et al.*), PoS 1056 (ICRC2015); astro-ph.HE/1510.05222 p. 37

Low-Energy (100 GeV – Few TeV) Neutrino Point-Source Searches in the Southern Sky with IceCube *(poster 2)* (IceCube Collaboration, Ström *et al.*), PoS 1053 (ICRC2015); astro-ph.HE/1510.05222 p. 29

Results of Neutrino Point-Source Searches with 2008 - 2014 IceCube Data above 10 TeV (IceCube Collaboration, Coenders *et al.*), PoS 1047 (ICRC2015); astro-ph.HE/1510.05222 p. 5

Search for Neutrino Emission from Extended Sources with the IceCube Detector *(poster 3)* (IceCube Collaboration, Pinat *et al.*), PoS 1091 (ICRC2015); astro-ph.HE/ 1510.05222 p. 59

Search for a Correlation between the UHECRs Measured by the Pierre Auger Observatory and the Telescope Array and the Neutrino Candidate Events from IceCube (IceCube Collaboration, Golup *et al.,* with Auger and CTA collaborations), PoS 1082 (ICRC2015), hep-ex/1511.02109

Searching for TeV Gamma-Ray Emission Associated with IceCube High-Energy Neutrinos Using VERITAS (IceCube and VERITAS collaborations, Santander *et al.*), PoS 785 (ICRC2015); astro-ph.HE/1509.00517

Neutrino-Triggered Target-of-Opportunity Programs in IceCube *(poster 2)* (IceCube Collaboration, Góra *et al.*), PoS 1052 (ICRC2015); astro-ph.HE/1510.05222 p. 21

The Online Follow-Up Framework for Neutrino-Triggered Alerts from IceCube (IceCube Collaboration, Stasik *et al.*), PoS 1069 (ICRC2015); astro-ph.HE/1510.05222 p. 45

A Search for Neutrinos from Gamma-Ray Bursts with the IceCube Neutrino Detector *(poster 2)* (IceCube Collaboration, Brayeur and Casier *et al.*), PoS 1048 (ICRC2015); astro-ph.HE/1510.05222 p. 13

Online and Near Realtime Searches for Neutrinos from GRBs with IceCube *(poster 2)* (IceCube Collaboration, Felde *et al.*), PoS 1089 (ICRC2015); astro-ph.HE/1510.05222 p. 51

Recent Improvements in the Detection of Supernovae with the IceCube Observatory *(poster 3)* (IceCube Collaboration, Baum *et al.*), PoS 1096 (ICRC2015); astro-ph.HE/1510.05227 p. 5

Search for Sterile Neutrinos with the IceCube Neutrino Observatory (IceCube Collaboration, Wallraff *et al.*), PoS 1100 (ICRC2015); astro-ph.HE/1510.05227 p. 13

Simulation Studies for a Surface Veto Array to Identify Astrophysical Neutrinos at the South Pole *(poster 2)* (IceCube Collaboration, Euler and Gonzales *et al.*), PoS 1070 (ICRC2015); astro-ph.IM/1510.05228 p. 6

Motivations and Techniques of a Surface Detector to Veto Air Showers for Neutrino Astronomy with IceCube at the Southern Sky (IceCube Collaboration, Auffenberg *et al.*), PoS 1156 (ICRC2015); astro-ph.IM/1510.05228 p. 70

A Precision Optical Calibration Module for IceCube-Gen2 *(poster 1)* (IceCube Collaboration, Krings *et al.*), PoS 1133 (ICRC2015); astro-ph.IM/1510.05228 p. 22

PINGU Camera *(poster 1)* (IceCube Collaboration, Bose and Rott *et al.*), PoS 1145 (ICRC2015); astro-ph.IM/1510.05228 p. 38

The IceCube-Gen2 High-Energy Array (IceCube Collaboration, Blaufuss *et al.*), PoS 1146 (ICRC2015); astro-ph.IM/1510.05228 p. 46

Generation-2 IceCube Digital Optical Module & DAQ *(poster 1)* (IceCube Collaboration, DuVernois *et al.*), PoS 1148 (ICRC2015); astro-ph.IM/1510.05228 p. 62

Multi-PMT Optical Modules for IceCube-Gen2 *(poster 1)* (IceCube Collaboration, Classen *et al.*), PoS 1147 (ICRC2015); astro-ph.IM/1510.05228 p. 54

A Dual-PMT Optical Module (D-Egg) for IceCube-Gen2 *(poster 1)* (IceCube Collaboration, Lu *et al.*), PoS 1137 (ICRC2015); astro-ph.IM/1510.05228 p. 30

Cosmic-Ray Science Potential for an Extended Surface Array at the IceCube Observatory (IceCube Collaboration, Seckel *et al.*), PoS 694 (ICRC2015); astro-ph.IM/1510.05228 p. 6

Status of the PINGU Detector (IceCube Collaboration, Clark *et al.*), PoS 1174 (ICRC2015); astro-ph.IM/1510.05228 p. 78

An Estimate of the Live Time of Optical Measurements of Air Showers at the South Pole *(poster)* (Segev BenZvi), CR-IN; indico.cern.ch/event/344485/session/138/contribution/220

Evaluation of Expected Solar Flare Neutrino Events in the IceCube Observatory *(poster 3)* (Gwenhaël De Wasseige *et al.*); indico.cern.ch/event/344485/session/136/contribution/194

Recent Results on Cosmic Ray Physics with the IceCube Observatory (IceCube Collaboration, Karg *et al.*), PoS 365 (ICRC2015)

Search for Point-Like Neutrino Sources over the Southern Hemisphere with the ANTARES and IceCube Neutrino Telescopes (ANTARES and IceCube collaborations, Martí and Finley *et al.*), PoS 1076 (ICRC2015)

Recent Observations of Atmospheric Neutrinos with the IceCube Observatory (IceCube Collaboration, Desiati *et al.*), highlight talk, PoS 028 (ICRC2015)

2013 – Rio de Janeiro, Brazil

IceCube Collaboration Contributions to the 2013 ICRC *are grouped together on astro-ph.HE/ and .IM in 6 distinct files. ICO-I is Point Source Searches, ICO-II is Atmospheric and Diffuse, ICO-III is Cosmic Rays, ICO-IV is Dark Matter and Exotic Particles, ICO-V is Neutrino Oscillations and Supernova, and ICO-VI is Ice Properties, Reconstruction and Future Developments. Search at 143.107.180.38/indico/contributionListDisplay.py?confId=0*

Recent Highlights from IceCube (IceCube Collaboration, Klein *et al.*), Braz. J. Phys. **44** 5 540 (2014); astro-ph.HE/1311.6519.

Measurement of the Cosmic-Ray Energy Spectrum with IceTop-73 (IceCube Collaboration, Gonzalez *et al.*), cbpf.br/~icrc2013/proc_icrc2013.html 0246; astro-ph.HE/1309.7006 ICO-III 5.

Results from Low-Energy Neutrino Searches for Dark Matter in the Galactic Center with IceCube-DeepCore (IceCube Collaboration, Wolf *et al.*); astro-ph.HE/1309.7007 ICO-IV 5.

Model Independent Search for GRB Neutrinos Interacting inside IceCube (IceCube Collaboration, Casey *et al.*), cbpf.br/~icrc2013/proc_icrc2013.html 0367; astro-ph.HE/ 1309.6979 ICO-I 5.

Ground-Level Enhancement of May 17, 2012 Observed at South Pole (IceCube Collaboration, Kuwabara *et al.*), SH-EX 368; astro-ph.HE/1309.7006 ICO-III 9.

Search for Extraterrestrial Neutrino-Induced Cascades Using IceCube 79-Strings (IceCube Collaboration, Lesiak-Bzdak *et al.*), cbpf.br/~icrc2013/proc_icrc2013.html 0370; astro-ph.HE/ 1309.7003 ICO-II 5.

IceTop as a Veto in Astrophysical Neutrino Searches for IceCube (poster) (IceCube Collaboration, Auffenberg *et al.*), cbpf.br/~icrc2013/proc_icrc2013.html 373; astro-ph.HE/ 1309.7010 ICO-VI 5.

IceVeto: An Extension of IceTop to Veto Horizontal Air Showers (poster) (IceCube Collaboration, Auffenberg *et al.*); astro-ph.HE/1309.7010 ICO-VI 9.

An Update on Cosmic-Ray Anisotropy Studies with IceCube (IceCube Collaboration, Santander *et al.*); astro-ph.HE/ 1309.7006 ICO-III 13.

Ultra–High-Energy Neutrino Alert System for GRB and Transient Astronomical Sources (IceCube Collaboration, Ishihara *et al.*), NU-EX 409; astro-ph.HE/1309.6979 ICO-I 9.

Study of Time-Dependence of the Cosmic-Ray Anisotropy with IceCube and AMANDA (IceCube Collaboration, Karg *et al.*); astro-ph.HE/1309.7006 ICO-III 17.

Measurement of the Atmospheric $\nu\mu$ Spectrum with IceCube-59 (poster) (IceCube Collaboration, Ruhe *et al.*); astro-ph.HE/1309.7003 ICO-II 9.

Search for Relativistic Magnetic Monopoles with the IceCube Neutrino Telescope (IceCube Collaboration, Posselt *et al.*); astro-ph.HE/1309.7007 ICO-IV 5.

An Improved Data Acquisition System for Supernova Detection with IceCube (IceCube Collaboration, Baum *et al.*); astro-ph.HE/ 1309.7008 ICO-V 5.

Detection of Galactic-Core–Collapse Supernovae with IceCube (IceCube Collaboration, Kroll *et al.*); astro-ph.HE/1309.7008 ICO-V 9.

Measurement of Neutrino Oscillations with the Full IceCube Detector (IceCube Collaboration, Yañez *et al.*); astro-ph.HE/1309.7008 ICO-V 13.

Multipole Analysis with IceCube to Search for Dark Matter Accumulated in the Galactic Halo (IceCube Collaboration, Reimann *et al.*); astro-ph.HE/1309.7007 ICO-IV 13.

Search for Sterile Neutrinos with the IceCube Neutrino Observatory (IceCube Collaboration, Wallraff *et al.*); astro-ph.HE/1309.7008 ICO-V 17.

Earth WIMP Searches with IceCube (IceCube Collaboration, Kunnen *et al.*); astro-ph.HE/1309.7007 ICO-IV 17.

The Future of Neutrino Oscillations with IceCube / DeepCore (IceCube Collaboration, Wiebusch *et al.*); astro-ph.HE/1309.7008 ICO-V 21.

Searches for Multiple Neutrino Sources in the Cygnus Region and Beyond with Three Years of IceCube Data (IceCube Collaboration, Bernhard *et al.*); astro-ph.HE/ 1309.6979 ICO-I 12.

Seasonal Variations of Atmospheric Neutrino Flux Detected by the IceCube Observatory (IceCube Collaboration, Gaisser *et al.*); astro-ph.HE/1309.7003 ICO-II 13.

Cascade Reconstruction at the Glashow Resonance in IceCube (IceCube Collaboration, Kiryluk *et al.*); astro-ph.HE/1309.7003 ICO-II 17.

High-Energy Gamma-Ray Follow-Up Program Using Neutrino Triggers from IceCube (IceCube Collaboration, Góra *et al.*); astro-ph.HE/1309.6979 ICO-I 16.

Search for Multi-Flares of High-Energy Neutrinos from Active Galactic Nuclei with the IceCube Detector (IceCube Collaboration, Cruz Silva *et al.*); astro-ph.HE/1309.6979 ICO-I 20.

Calculating Energy-Dependent Limits on Neutrino Point-Source Fluxes with Stacking and Unfolding Techniques in IceCube (IceCube Collaboration, Clevermann *et al.*); astro-ph.HE/1309.6979 ICO-I 24.

Latest Results of Searches for Point and Extended Sources of Neutrinos with the IceCube Detector (IceCube Collaboration, Aguilar Sanchez *et al.*); astro-ph.HE/ 1309.6979 ICO-I 28.

Study of the Sensitivity of IceCube / DeepCore to Atmospheric Neutrino Oscillations (IceCube Collaboration, Gross *et al.*); astro-ph.HE/1309.7010 ICO-VI 13.

Probing Cosmic-Ray Production in Massive Open Star Clusters with Three yrs of IceCube Data (IceCube Collaboration, Gross *et al.*); astro-ph.HE/1309.6979 ICO-I 32.

Extending IceCube Low-Energy Neutrino Searches for Dark Matter with DeepCore (IceCube Collaboration, Flis *et al.*); astro-ph.HE/ 1309.7007 ICO-IV 21.

Apparent Optical Anisotropy of the South Pole Ice (IceCube Collaboration, Chirkin *et al.*); astro-ph.HE/1309.7010 ICO-VI 17.

Results and Future Developments of the Search for Subrelativistic Magnetic Monopoles with IceCube (IceCube Collaboration, Benabderrahmane *et al.*); astro-ph.HE/ 1309.7007 ICO-II 25.

Event Reconstruction in IceCube Based on Direct Event Re-Simulation (IceCube Collaboration, Chirkin *et al.*); astro-ph.HE/1309.7003 ICO-VI 21.

Detection of Tau Neutrinos in IceCube with Double Pulses (IceCube Collaboration, Williams *et al.*); astro-ph.HE/1309.7003 ICO-II 21.

Searches for Flaring and Periodic Neutrino Emission with Three Years of IceCube Data (IceCube Collaboration, Montaruli *et al.*); astro-ph.HE/1309.6979 ICO-I 36.

Observation of Very–High-Energy Neutrinos in IceCube (IceCube Collaboration, Kopper *et al.*); astro-ph.HE/1309.7003 ICO-II 25.

Search for Diffuse Astrophysical Neutrinos with Cascade Events in the IC-59 Detector (IceCube Collaboration, Schönwald *et al.*); astro-ph.HE/1309.7003 ICO-II 29.

100 TeV - PeV Air Showers with IceTop (IceCube Collaboration, Haj Ismail *et al.*); astro-ph.HE/1309.7006 ICO-III 21.

Exotic Signatures in IceCube from Physics beyond the Standard Model – Signal Simulations and Background Studies (IceCube Collaboration, Gerhardt *et al.*); astro-ph.HE/1309.7007 ICO-IV 29.

Seasonal Variation of the Muon Multiplicity in Cosmic at South Pole (IceCube Collaboration, de Ridder *et al.*); astro-ph.HE/1309.7006 ICO-VIII 25.

Robust Statistics in IceCube Initial Muon Reconstruction (IceCube Collaboration, Wellons *et al.*); astro-ph.HE/1309.7010 ICO-VI 25.

Measurement of Atmospheric Neutrino Oscillations with IceCube / DeepCore in its 79-String Configuration (IceCube Collaboration, Wiebusch *et al.*); astro-ph.HE/ 1309.7008 ICO-V 25.

Optical and X-Ray Follow-Up Analyses with IceCube (IceCube Collaboration, Voge *et al.*); astro-ph.HE/1309.6979 ICO-I 40.

Measurement of the Cosmic-Ray Composition and Energy Spectrum between 1 PeV and 1 EeV with IceTop and IceCube (IceCube Collaboration, Feusels *et al.*), cbpf.br/~icrc2013/ proc_icrc2013.html 0861; astro-ph.HE/1309.7006 ICO-III 25.

Stacked Searches for High-Energy Neutrinos from Blazars with the IceCube Detector (IceCube Collaboration, Schatto *et al.*); astro-ph.HE/ 1309.6979 ICO-I 44.

Inclined Cosmic-Ray Air Showers in IceCube (IceCube Collaboration, Gonzalez *et al.*); astro-ph.HE/1309.7006 ICO-III 33.

The Effect of Snow Accumulation on Signals in IceTop (IceCube Collaboration, Rawlins *et al.*); astro-ph.HE/1309.7006 ICO-III 37.

Search for Prompt Neutrino Emission from Gamma-Ray Bursts with IceCube (IceCube Collaboration, Richman *et al.*); astro-ph.HE/1309.6979 ICO-VI 48.

2011 – Beijing, China

IceCube Collaboration Contributions to the 2011 ICRC *are grouped together on astro-ph.HE/ and .IM in 6 distinct files. I is Point Source Searches, II is Diffuse, III is Cosmic Rays, IV is Searches for Dark Matter and Exotic Particles, V is Future Developments, and VI is Oscillations, Supernova and Ice.*

IceCube: Astrophysics and Astroparticle Physics at the South Pole (IceCube Collaboration, Kolanoski *et al.*); astro-ph.HE/1111.5188

Search for Atmospheric-Neutrino–Induced Particle Showers with IceCube-40 (poster) (IceCube Collaboration, Middell *et al.*), *in* Proc. of the 32nd ICRC HE2.3 1097 (2011); astro-ph.HE/1111.2736 (IC II) p. 5

Search for a Diffuse Flux of Astrophysical Muon Neutrinos with the IceCube Detector (IceCube Collaboration, Schukraft, Grullon, Wallraff *et al.*), *in* Proc. of the 32nd ICRC HE2.3 736 (2011); astro-ph.HE/1111.2736 (IC II) p. 13

Studies on the Unfolding of the Atmospheric Neutrino Spectrum with IC59 Using the TRUEE Algorithm (poster) (IceCube Collaboration, Milke *et al.*), *in* Proc. of the 32nd ICRC HE2.2 833 (2011); astro-ph.HE/1111.2736 (IC II) p. 1

The Search for Extremely High-Energy Neutrinos with IceCube (IceCube Collaboration, Wissing Ishihara *et al.*), Proc. of 32nd ICRC HE1.3 949 (2011); astro-ph.HE/ 1111.2736 (IC II) p. 25

New Background Rejection Methods for the GZK Neutrino Search with IceCube (poster) (IceCube Collaboration, Auffenberg *et al.*), *in* Proc. of the 32nd ICRC HE2.3 778 (2011); astro-ph.HE/1111.2736 (IC II) p. 29

The Baseline Capability of the Cosmogenic Neutrino Search with IceCube (poster) (IceCube Collaboration, Ishihara *et al.*), *in* Proc. of the 32nd ICRC HE1.3 773 (2011); astro-ph.HE/1111.2735 (IC II) p. 21

Search for Astrophysical Neutrino-Induced Cascades Using IC40 (poster) (IceCube Collaboration, Hickford, Pannin *et al.*), *in* Proc. of the 32nd ICRC OG2.1 759 (2011); astro-ph.HE/1111.2736 (IC II) p. 17

Observation of Atmospheric-Neutrino–Induced Cascades in IceCube with DeepCore (poster) (IceCube Collaboration, Ha *et al.*), *in* Proc. of the 32nd ICRC HE2.2 324 (2011); astro-ph.HE/1111.2736 (IC II) p. 9

Atmospheric Neutrino Oscillations with DeepCore (poster) (IceCube Collaboration, Xu *et al.*), *in* Proc. of 32nd ICRC HE2.2 329 (2011); astro-ph.HE/1111.2731 (IC VI) p. 1

Study of South Pole Ice Transparency with IceCube Flashers (poster) (IceCube Collaboration, Chirkin *et al.*), *in* Proc. of 32nd ICRC HE2.3 333 (2011); astro-ph.HE/1111.2731 (IC VI) p. 9

Cosmic-Ray Composition from the 40-String IceCube/IceTop Detectors (IceCube Collaboration, Andeen, Rawlins, Feusels *et al.*), *in* Proc. of the 32nd ICRC HE1.1 923 (2011); astro-ph.HE/1111.2735 (IC III) p. 5

The IceTop Air Shower Array: Detector overview, physics goals, and first result (IceCube Collaboration, Kolanoski *et al.*), in Proc. of 32nd ICRC HE1.2 807 (2011); astro-ph.HE/1111.2735 (IC III) p. 1

Measurements of the Air Shower Parameters with IceTop (IceCube Collaboration, Hussain *et al.*), *in* Proc. of 32nd ICRC HE1.2 336 (2011); astro-ph.HE/1111.2735 (IC III) p. 13

Seasonal Variations of High-Energy Cosmic-Ray Muons Observed by the IceCube Observatory as a Probe of Kaon/Pion Ratio (poster) (IceCube Collaboration, Desiati *et al.*), *in* Proc. of 32nd ICRC HE1.1 662 (2011); astro-ph.HE/1111.2735 (IC III) p. 9

Atmospheric Muon Spectrum from Catastrophic Energy Losses in IceCube (IceCube Collaboration, Xu, Berghaus *et al.*), *in* Proc. of the 32nd ICRC HE2.3 85 (2011); astro-ph.HE/1111.2735 (IC III) p. 25

Observation of Anisotropy in the Arrival Direction Distribution of Cosmic Rays at TeV Energies with IceCube (IceCube Collaboration, BenZvi, Santander, Toscano, Westerhoff *et al.*), *in* Proc. of the 32nd ICRC HE2.1 306 (2011); astro-ph.HE/ 1111.2735 (IC III) p. 41

Energy Dependence of the Large-Scale Galactic Cosmic-Ray Anisotropy Measured with IceCube (IceCube Collaboration, Abbasi, Desiati *et al.*), *in* Proc. of the 32nd ICRC HE1.1 305 (2011); astro-ph.HE/1111.2735 (IC III) p. 37

Measurement of the Solar Anisotropy with IceCube (poster) (IceCube Collaboration, Abbasi *et al.*), *in* Proc. of 32nd ICRC HE1.1 308 (2011); astro-ph.HE/1111.2735 (IC III) p. 45

Extensive Air Showers Measured by the 79-String IceCube Observatory at South Pole (poster) (IceCube Collaboration, Feusels, Tilav *et al.*), *in* Proc. of the 32nd ICRC HE1.2 838 (2011); astro-ph.HE/1111.2735 (IC III) p. 17

Simulation of IceTop VEM Calibration and the Dependency on the Snow Layer (poster)(IceCube Collaboration, Feusels for Van Overloop *et al.*), *in* Proc. of the 32nd ICRC HE1.1 899 (2011); astro-ph.HE/1111.2735 (IC III) p. 21

Study of High p_T Muons in IceCube (poster) (IceCube Collaboration, Gerhardt, Klein *et al.*), *in* Proc. of 32nd ICRC HE2.1 323 (2011); astro-ph.HE/1111.2735 (IC III) p. 29

Study of Forbush Decreases with IceTop (poster) (IceCube Collaboration, Kuwabara, Evenson *et al.*), *in* Proc. of the 32nd ICRC SH2.6 921 (2011); astro-ph.HE/ 1111.2735 (IC III) p. 49

Searching for PeV Gamma Rays with IceCube (IceCube Collaboration, Buitink *et al.*), *in* Proc. of the 32nd ICRC HE1.1 939 (2011); astro-ph.HE/1111.2735 (IC III) p. 33

Time-Independent Searches for Astrophysical Neutrino Sources with the Combined Data of 40 and 59 Strings of IceCube (poster)(IceCube Collaboration, Baker *et al.*), *in* Proc. of the 32nd ICRC OG2.3 909 (2011); astro-ph.HE/1111.2741 (IC I) p. 1

Search for Astrophysical Neutrinos from Extended and Stacked Sources with IceCube (poster) (IceCube Collaboration, Baker, Kurahashi *et al.*), *in* Proc. of the 32nd ICRC OG2.1 796 (2011); astro-ph.HE/1111.2741 (IC I) p. 9

Searches for Time-Variable Neutrino Point Sources with the IceCube Observatory (poster) (IceCube Collaboration, Baker *et al.*), *in* Proc. of the 32nd ICRC OG2.3 784 (2011); astro-ph.HE/1111.2741 (IC I) p. 5

Search for Galactic Cosmic-Ray Accelerators with the Combined IceCube 40-String and AMANDA Detectors (poster) (IceCube Collaboration, Odrowski, Resconi, Sestayo *et al.*), *in* Proc. of 32nd ICRC HE2.3 320 (2011); astro-ph.HE/1111.2741 (IC I) p. 13

Time-Dependent Search for Neutrino Multiflare Sources with the IceCube 59-String Data (poster) (IceCube Collaboration, Góra, Bernardini, Cruz Silva *et al.*), *in* Proc. of the 32nd ICRC OG2.5 289 (2011); astro-ph.HE/1111.2741 (IC I) p. 17

Limits on Neutrino Emission from Gamma-Ray Bursts with the 59-String IceCube Detector (IceCube Collaboration, Redl *et al.*), *in* Proc. of the 32nd ICRC HE2.3 764 (2011); astro-ph.HE/1111.2741 (IC I) p. 29

Optical Followup Program of IceCube Multiplets: Testing for Soft Relativistic Jets in Core-Collapse Supernovae (poster) (IceCube Collaboration, Franckowiak *et al.,* C. Akerlof *et al.*), *in* Proc. of the 32nd ICRC HE2.3 445 (2011); astro-ph.HE/1111.2741 (IC I) p. 21

SWIFT Followup of IceCube Multiplets (poster) (IceCube Collaboration, Homaier *et al.* & SWIFT collaboration, M. Smith *et al.*), *in* Proc. of the 32nd ICRC HE2.3 535 (2011); astro-ph.HE/ 1111.2741 (IC I) p. 25

Detecting Neutrinos from Choked GRB with IceCube's DeepCore (poster) (IceCube Collaboration, Daughhetee, Taboada *et al.*), *in* Proc. of the 32nd ICRC OG2.4 288 (2011); astro-ph.HE/1111.2741 (IC I) p. 33

The Shadow of the Moon in Cosmic Rays Measured with IceCube (IceCube Collaboration, Boersma *et al.* & H. Stiebel), *in* Proc. of the 32nd ICRC HE2.3 1235 (2011); astro-ph.HE/1111.2741 (IC I) p. 41

Neutrino-Triggered High-Energy Gamma-Ray Follow-Up with IceCube (poster) (IceCube Collaboration, Gora, Franke, Bernardini *et al.*), *in* Proc. of the 32nd ICRC HE2.3 334 (2011); astro-ph.HE/1111.2741 (IC I) p. 37

First Step Toward a New Proton Decay Experiment in Ice (poster) (IceCube Collaboration, Odrowski *et al.*), Proc. of 32nd ICRC HE3.2 325 (2011); astro-ph.IM/1111.2742 (IC V) p. 13

The Radio Air Shower Test Array (RASTA) - Enhancing the IceCube Observatory (IceCube Collaboration, DuVernois *et al.*), *in* Proc. of the 32nd ICRC HE1.4 1102 (2011); astro-ph.IM/1111.2742 (IC V) p. 5

Status and Recent Results of the South Pole Acoustic Test Setup (IceCube Collaboration, Abdou *et al.*), Proc. of the 32nd ICRC HE1.4 316 (2011); astro-ph.IM/1111.2742 (IC V) p. 1

IceCube's In-Ice Radio-Frequency Extension (IceCube Collaboration, Landsman, Richman, Hoffman *et al.*), Proc. of 32nd ICRC HE2.3 1236 (2011); astro-ph.IM/1111.2742 (IC V) p. 9

Supernova Detection with IceCube and Beyond (poster) (IceCube Collaboration, Ribordy *et al.*), *in* Proc. of the 32nd ICRC HE2.3 1137 (2011); astro-ph.HE/1111.2731 (IC VI) p. 5

Search for Dark Matter in the Milky Way with IceCube (IceCube Collaboration, Rott, Bissok *et al.*), *in* Proc. of the 32nd ICRC HE3.4 1187 (2011); astro-ph.HE/1111.2738 (IC IV) p. 9

Indirect Search for Solar Dark Matter with AMANDA and IceCube (IceCube Collaboration, Engdegård *et al.*), Proc. 32nd ICRC HE3.4 327 (2011); astro-ph.HE/1111.2738 (IC IV) p. 1

Searches for Dark Matter Annihilations in the Sun with IceCube and DeepCore in the 79-String Configuration (poster) (IceCube Collaboration, Danninger, Strahler *et al.*), *in* Proc. of the 32nd ICRC HE3.4 292 (2011); astro-ph.HE/1111.2738 (IC IV) p. 5

Search Strategies for Dark Matter in Nearby Dwarf Spheroidal Galaxies with IceCube (IceCube Collaboration, Lünemann, Rott *et al.*), *in* Proc. of the 32nd ICRC HE3.4 1024 (2011); astro-ph.HE/1111.2738 (IC IV) p. 13

Search Strategies for Relativistic Magnetic Monopoles with the IceCube Neutrino Telescope (poster) (IceCube Collaboration, Posselt, Christy *et al.*), *in* Proc. of the 32nd ICRC HE3.3 734 (2011); astro-ph.HE/1111.2738 (IC IV) p. 17

2009 – Lodz, Poland

IceCube Collaboration Contributions to the 2009 ICRC *are grouped together as astro-ph.HE/10042093 (2010).*

Sensor Development and Calibration for Acoustic Neutrino Detection in Ice (IceCube Collaboration, Bissok *et al.*), *in* Proc. of the 31st ICRC HE2.4 903; astro-ph.IM/0907.3561

Physics Capabilities of the IceCube DeepCore Detector (IceCube Collaboration, Wiebusch *et al.*), *in* Proc. of the 31st ICRC OG2.5 1352; astro-ph.IM/0907.2263

Large-Scale Cosmic-Ray Anisotropy with IceCube (IceCube Collaboration, Abbasi, Desiati *et al.*), *in* Proc. of the 31st ICRC SH3.2 1340; astro-ph.HE/0907.0498

Search for the Kaluza-Klein Dark Matter with the AMANDA / IceCube Detectors (IceCube Collaboration, Danninger, Han *et al.*), *in* Proc. of the 31st ICRC HE2.3 1356; astro-ph.HE/0906.3969

AMANDA 7-yr Multipole Analysis (IceCube Collaboration, Schukraft, Hülß *et al.*), *in* Proc. of the 31st ICRC OG2.5 1127; astro-ph.HE/0906.3942

Searches for WIMP Dark Matter from the Sun with AMANDA (IceCube Collaboration, Braun, Hubert *et al.*), *in* Proc. of the 31st ICRC HE2.3 834; astro-ph.HE/0906.1615

Moon-Shadow Observation by IceCube (IceCube Collaboration, Boersma *et al.*), Proc. of the 31st ICRC OG2.5 1173; astro-ph.HE/1002.4900

All-Sky Point-Source Search with 40 Strings of IceCube (IceCube Collaboration, Dumm *et al.*), *in* Proc. of the 31st ICRC OG2.5 653

IceCube Time-Dependent Point-Source Analysis Using Multiwavelength Information (IceCube Collaboration, Baker *et al.*), *in* Proc. of the 31st ICRC OG2.5 812

Search for Diffuse High-Energy Neutrinos with IceCube (IceCube Collaboration, Hoshina *et al.*), *in* Proc. of the 31st ICRC OG2.5 1400

Direct Measurement of the Atmospheric Muon Energy Spectrum with IceCube (IceCube Collaboration, Berghaus *et al.*), *in* Proc. of the 31st ICRC HE1.5 1565; astro-ph.HE/0909.0679

Measurement of the Atmospheric Neutrino Energy Spectrum with IceCube (IceCube Collaboration, Chirkin *et al.*), *in* Proc. of the 31st ICRC HE2.2 1418

40Searches for Neutrinos from GRBs with the IceCube 22-String Detector and Sensitivity Estimates for the Full Detector (IceCube Collaboration, Kappes *et al.*), *in* Proc. of the 31st ICRC OG2.4 1221

Reconstruction of IceCube Coincident Events and Study of Composition-Sensitive Observables Using Both the Surface and Deep Detectors (IceCube Collaboration, Feusels *et al.*), *in* Proc. of the 31st ICRC HE1.3 518; astro-ph.HE/0912.4668

Cosmic-Ray Composition Using SPASE-2 and AMANDA (IceCube Collaboration, Andeen *et al.*), *in* Proc. of the 31st ICRC HE1.2 785

Atmospheric Variations as Observed by IceCube (IceCube Collaboration, Tilav *et al.*), *in* Proc. of the 31st ICRC HE1.1 1398; astro-ph.HE/1001.0776

Search for High-Energetic Neutrinos from Supernova Explosions with AMANDA (IceCube Collaboration, Lennarz *et al.*), *in* Proc. of the 31st ICRC OG2.5 1198; astro-ph.HE/0907.4621

Search for Neutrino Flares from Point Sources with IceCube (IceCube Collaboration, Bazo Alba *et al.*), *in* Proc. of the 31st ICRC OG2.5 960; astro-ph.HE/0908.4209

Neutrino Triggered High-Energy Gamma-Ray Follow-Up with IceCube (IceCube Collaboration, Franke *et al.*), *in* Proc. of the 31st ICRC OG2.5 987

IceCube / AMANDA Combined Analyses for the Search of Neutrino Sources at Low Energies (IceCube Collaboration, Portello-Roucelle *et al.*), *in* Proc. of the 31st ICRC OG2.5 1289

First Search for Extraterrestrial Neutrino-Induced Cascades with IceCube (IceCube Collaboration, Kiryluk *et al.*), *in* Proc. of the 31st ICRC OG2.5 882; astro-ph.HE/0909.0989

Atmospheric Neutrino Oscillation Measurements with IceCube (IceCube Collaboration, Rott *et al.*), *in* Proc. of the 31st ICRC HE 2.2 785

Search for Ultra–High-Energy Neutrinos with AMANDA (IceCube Collaboration, Silvestri *et al.*), *in* Proc. of the 31st ICRC OG2.5 549

Improved Reconstruction of Cascade-Like Events (IceCube Collaboration, Middell *et al.*), *in* Proc. of the 31st ICRC OG2.5 708

A Search for Atmospheric Neutrino-Induced Cascades (IceCube Collaboration, D'Agostino *et al.*), *in* Proc. of the 31st ICRC HE2.2 1311

Optical Follow-Up of High-Energy Neutrinos Detected by IceCube (IceCube and ROTSE collaborations, Francowiak *et al.*), *in* Proc. of the 31st ICRC OG2.5 764; astro-ph.HE/ 0909.0631

Search for GRB Neutrinos via a (Stacked) Time Profile Analysis (IceCube Collaboration, Duvoort *et al.*), *in* Proc. of the 31st ICRC OG2.4 393

Search for Neutrinos from GRBs with the IceCube 22-String Detector & Sensitivity Estimates for the Full Detector (IceCube Collaboration, Meagher *et al.*), Proc. of the 31st ICRC OG2.4 1221

Results and Prospects of Indirect Searches for Dark Matter with IceCube (IceCube Collaboration, Rott *et al.*), *in* Proc. of the 31st ICRC HE2.3 505

The Extremely High-Energy Neutrino Search with IceCube (IceCube Collaboration, Mase *et al.*), *in* Proc. of the 31st ICRC HE1.4 861

Study of Very Bright Cosmic-Ray Induced Muon Bundle Signatures Measured by the IceCube Detector (IceCube Collaboration, Ishihara *et al.*), *in* Proc. of the 31st ICRC HE1.5 913

Supernova Search with the AMANDA / IceCube Neutrino Telescopes (IceCube Collaboration, Kowarik *et al.*), *in* Proc. of the 31st ICRC OG2.2 1251; astro-ph.HE/0908.0441

Small Air Showers in IceCube (IceCube Collaboration, Ruzybayev *et al.*), *in* Proc. of the 31st ICRC HE1.1 737; astro-ph.HE/0912.0896

A First All-Particle Cosmic-Ray Energy Spectrum from IceTop (IceCube Collaboration, Kislat *et al.*), *in* Proc. of the 31st ICRC HE1.2 970

Study of High pT Muons in IceCube (IceCube Collaboration, Gerhardt *et al.*), *in* Proc. of the 31st ICRC HE1.5 519; astro-ph.HE/0909.0055

Search for High-Energy Tau Neutrinos in IceCube (IceCube Collaboration, Seo *et al.*), *in* Proc. of the 31st ICRC OG2.5 1372

Implementation of an Active Veto against Atmospheric Muons in IceCube DeepCore (IceCube Collaboration, Euler *et al.*), *in* Proc. of the 31st ICRC OG2.5 1289

Fundamental Neutrino Measurements with IceCube DeepCore (IceCube Collaboration, Grant *et al.*), *in* Proc. of the 31st ICRC HE2.2 1336

Acoustic Detection of High-Energy Neutrinos in Ice (IceCube Collaboration, Descamps *et al.*), *in* Proc. of the 31st ICRC HE2.4 1293; astro-ph.IM/0908.3251

Search for Quantum Gravity with IceCube and High-Energy Atmospheric Neutrinos (IceCube Collaboration, Huelsnitz *et al.*), *in* Proc. of the 31st ICRC HE2.3 484

2007 – Merida, Mexico

IceCube - Construction Status and Performance Results of the 22-String Detector (IceCube Collaboration, Karle et al.), Proc. of the 30th ICRC 6 835 HE3.5; astro-ph/0711353, 7

The Combined AMANDA and IceCube Neutrino Telescope (IceCube Collaboration, Gross et al.), in Proc. of the 30th ICRC 3 1253 OG2.5; astro-ph/0711353, 11

Performance of IceTop Array (IceCube Collaboration, Gaisser et al.), in Proc. of the 30th ICRC 5 1001 HE1.5; astro-ph/0711353, 15

Heliospheric Physics with IceTop (IceCube Collaboration, Kuwabara et al.), in Proc. of the 30th ICRC 1 339 SH2.1; astro-ph/0711353, 19

Measuring Cosmic Ray Composition at the Knee with SPASE2 and AMANDA (SPASE2 and IceCube collaborations, Andeen et al.), in Proc. of the 30th ICRC 2 165 OG1.2; astro-ph/0711353, 23

Cosmic Rays in IceCube: Composition-Sensitive Observables (IceCube Collaboration, Song et al.), in Proc. of the 30th ICRC 6 143 HE1.2A; astro-ph/0711353, 27

Search for TeV Gamma Rays from Point Sources with SPASE-2 (IceCube Collaboration, James et al.), in Proc. of the 30th ICRC 2 735 OG2.2; astro-ph/0711353, 31

Radio Detection of GZK Neutrinos: AURA Status and Plans (IceCube Collaboration, Landsman et al.), in Proc. of the 30th ICRC 4 827 HE3.5; astro-ph/0711353, 163

The Highest Energy Neutrinos, highlight talk at the 30th Intl. Cosmic Ray Conference, Merida, Mexico (2007), Proc. of the 30th ICRC 1323 (2008); astro-ph/0714156.

2005 – Pune, India

Declination-dependent Study of AMANDA-II Atmospheric Neutrino Data (IceCube Collaboration, Halzen et al.), in Proc. of the 29th ICRC, 00 101.

An Investigation of Seasonal Variations in the Atmospheric Neutrino Rate with the AMANDA-II Neutrino Telescope (IceCube Collaboration, Ackerman et al.), in Proc. of 29th ICRC, 9 107.

Search for Diffuse Flux of Extraterrestrial Muon Neutrinos using AMANDA-II Data from 2000 to 2003 (IceCube Collaboration, Hodges *et al*.), *in* Proc. of 29th ICRC, **5** 115.

Search for a Diffuse Flux of Non-Terrestrial Muon Neutrinos with the AMANDA Detector (IceCube Collaboration, Munich *et al*.), *in* Proc. of the 29th ICRC, **5** 17.

Sensitivity of AMANDA-II to UHE Neutrinos (IceCube Collaboration, Gerhardt *et al*.), *in* Proc. of the 29th ICRC, **5** 111.

Probing for Leptonic Signatures from GRB030329 with AMANDA-II (IceCube Collaboration, Stamatikos *et al*.), *in* Proc. of the 29th ICRC, **4** 471; astro-ph/0510036

The Search for Neutrinos from Gamma-Ray Bursts with AMANDA (IceCube Collaboration, Kuehn *et al*.), *in* Proc. of the 29th ICRC, **5** 131.

Neutrino-Induced Cascades from GRBs with AMANDA-II (IceCube Collaboration, Hughey *et al*.), *in* Proc. of the 29th ICRC, **5** 119.

Air Showers with IceCube: First Engineering Data (IceCube Collaboration, Gaisser *et al*.), *in* Proc. of the 29th ICRC, **8** 315.

Calibration and Characterization of Photomultiplier Tubes of the IceCube Neutrino Detector (IceCube Collaboration, Miyamoto *et al*.), *in* Proc. of the 29th ICRC, **5** 63.

IceCube: Initial Performance (IceCube Collaboration, Chirkin *et al*.), *in* Proc. of 29th ICRC, **8** 303.

Simulation of a Hybrid Optical/Radio/Extension to IceCube for EeV Neutrino Detection (IceCube Collaboration, Besson *et al*.), *in* Proc. of the 29th ICRC, **5** 21; astro-ph/0512604.

Multiwavelength Comparison of Selected Neutrino Point Source Candidates (IceCube Collaboration, Ackermann *et al*.), *in* Proc. of the 29th ICRC, **00** 101.

A Search for High-Energy Muon Neutrinos from the Galactic Plane with AMANDA-II (IceCube Collaboration, Kelley *et al*.), *in* Proc. of the 29th ICRC, **5** 127; astro-ph/0509546.

Search for High-Energy Neutrino Point Sources in the Northern Hemisphere with the AMANDA-II Neutrino Telescope (IceCube Collaboration, Ackermann *et al*.), *in* Proc. of 29th ICRC, **5** 5.

A Source-Stacking Analysis of AGN as a Neutrino Point Source Candidates with AMANDA (IceCube Collaboration, Gross *et al*.), *in* Proc. of the 29th ICRC, **5** 13.

Performance of AMANDA-II using Transient Waveform Recorders (IceCube Collaboration, Silvestri *et al*.), *in* Proc. of the 29th ICRC, **5** 431.

A Software Trigger for the AMANDA Neutrino Detector (IceCube Collaboration, Messarius *et al*.), *in* Proc. of the 29th ICRC, **5** 207.

Search for Neutralino Dark Matter with the AMANDA Neutrino Detector (IceCube Collaboration, Hubert *et al*.), *in* Proc. of the 29th ICRC, **9** 179.

Neutrino Astronomy with IceCube and AMANDA (IceCube Collaboration, Hill *et al*.), *in* Proc. of the 29th ICRC, **10** 213.

2003 – Tsukuba, Japan

Measurement of the Cosmic Ray Composition at the Knee with the SPASE-2/ AMANDA-B10 Detectors (SPASE and AMANDA collaborations, Rawlins *et al*.) *in* Proc. of the 28th ICRC, HE1.1 173.

Simulation of Ice Cherenkov Detectors for IceTop (IceCube Collaboration, Stanev *et al*.) *in* Proc. of the 28th ICRC, HE1.5 965.

IceTop: The Surface Component of IceCube (IceCube Collaboration, Gaisser *et al*.) *in* Proc. of the 28th ICRC, HE1.5 1117.

Cosmic Ray Flux Measurement with AMANDA-II (AMANDA collaboration, Chirkin *et al*.) *in* Proc. of the 28th ICRC, HE2.1 1211.

Search for High Energy Neutrinos of All Flavors with AMANDA II (AMANDA collaboration, Kowalski *et al*.) *in* Proc. of the 28th ICRC, HE2.3 1301.

Search for Extraterrestrial Point Sources of Neutrinos with AMANDA-II (AMANDA collaboration, Karle *et al*.) *in* Proc. of the 28th ICRC, HE2.3 1305.

AMANDA-B10 Limit on UHE Muon-Neutrinos (AMANDA collaboration, Hundertmark *et al*.) *in* Proc. of the 28th ICRC, HE2.3 1309.

Atmospheric Neutrino and Muon Spectra Measured with the AMANDA-II Detector (AMANDA collaboration, Geenan *et al*.) *in* Proc. of the 28th ICRC, HE2.3 1313.

Search for Diffuse Fluxes of Extraterrestrial Muon-Neutrinos with the AMANDA Detectors (AMANDA collaboration, Hill *et al*.) *in* Proc. of the 28th ICRC, HE2.3 1317.

Online Search for Neutrino Bursts from Supernovae with the AMANDA Detector (AMANDA collaboration, Feser *et al.) in* Proc. of the 28th ICRC, HE2.3 1325.

New Capabilities of the AMANDA-II High Energy Neutrino Detector (AMANDA collaboration, Wagner *et al*.) *in* Proc. of the 28th ICRC, HE2.3 1365.

The IceCube High Energy Neutrino Telescope (IceCube Collaboration, Yoshida *et al*.) *in* Proc. of the 28th ICRC, HE2.3 1369.

Response of AMANDA-II to Cosmic Ray Muons (AMANDA collaboration) *in* Proc. of the 28th ICRC, HE2.3 1373.

Search for Muons from WIMP Annihilation in the Center of the Earth with the AMANDA-B10 Detector (AMANDA collaboration, Olbrechts *et al*.) *in* Proc. of the 28th ICRC, HE3.3 1677.

Searching for High Energy Muon Neutrinos from Gamma-Ray Bursts with AMANDA (AMANDA collaboration, Hill *et al*.) *in* Proc. of the 28th ICRC, OG2.4 2717.

Recent Results from the AMANDA Neutrino Telescope (AMANDA collaboration, Köpke *et al*.) *in* Proc. of the 28th ICRC, **8** 323.

2001 – Hamburg, Germany

Analysis of Atmospheric Muons with AMANDA (AMANDA collaboration, Desiati *et al*.), *in* Proc. of the 27th ICRC, HE 2.1 HE205 985.

Calibration and Survey of AMANDA with SPASE (SPASE and AMANDA collaborations, Bai *et al*.), *in* Proc. of the 27th ICRC, HE 2.1 HE205 977.

Observation of High Energy Atmospheric Neutrinos with AMANDA (AMANDA collaboration, Wiebusch *et al*.) *in* Proc. of the 27th ICRC, HE 2.3 18:12 1109.

Search for a Diffuse Flux from Sources of High Energy Neutrinos with AMANDA-B10 (AMANDA collaboration, Hill *et al*.) *in* Proc. of the 27th ICRC, HE 2.3 18:24 1113.

Search for Cascade-like Events in the AMANDA-B10 Detector (AMANDA collaboration, Taboada *et al*.) *in* Proc. of the 27th ICRC, HE 2.3 18:36 1117.

Supernova Neutrino-Burst Search with the AMANDA Detector (AMANDA collaboration, Neunhöffer *et al*.) *in* Proc. of the 27th ICRC, HE 2.3 HE231 1125.

The AMANDA Search for High Energy Neutrinos from Gamma-Ray Bursts (AMANDA collaboration, Hardtke *et al.) in* Proc. of the 27th ICRC, HE 2.3 HE 232 1121.

Performance of the AMANDA-II Detector (AMANDA collaboration, Wischnewski *et al*.) *in* Proc. of the 27th ICRC, HE 2.3 HE233 1105.

A Method to Detect UHE Neutrinos with AMANDA (AMANDA collaboration, Hundertmark *et al*.) *in* Proc. of the 27th ICRC, HE 2.3 HE236 1129.

Time Calibration of the AMANDA Neutrino Telescope with Cosmic Ray Muons (AMANDA collaboration, Cowen *et al*.) *in* Proc. of the 27th ICRC, HE 2.3 HE 237 1133.

Potential of AMANDA-II in HE Neutrino Astrophysics (AMANDA collaboration, Barwick *et al*.) *in* Proc. of the 27th ICRC, HE 2.5 19:24 1101.

The IceCube Detector (IceCube Collaboration, Goldschmidt *et al*.) *in* Proc. of the 27th ICRC, HE 2.5 19:36 1237.

Science Potential of the IceCube Detector (AMANDA collaboration, Spiering *et al*.) *in* Proc. of the 27th ICRC, HE 2.5 HE256 1242.

Search for Relativistic Monopoles with the AMANDA Detector (AMANDA collaboration, Niessen *et al*.) *in* Proc. of the 27th ICRC, HE 3.4 HE 315 1496.

Performance Studies for the IceCube Detector (IceCube Collaboration, Leuthold *et al*.) *in* Proc. of the 27th ICRC, 1241.

1999 – Salt Lake City, Utah

From the First Neutrino Telescope, the Antarctic Muon and Neutrino Detector Array AMANDA, to the IceCube Observatory (AMANDA collaboration, Halzen *et al*.), *in* Proc. of the 26th ICRC, HE6.3.01 **2** 428.

Observation of Atmospheric Neutrino Events with AMANDA (AMANDA collaboration, Karle *et al.) in* Proc. of the 26th ICRC, HE4.2.05 **2** 221.

Nearly Vertical Upgoing Muons in the AMANDA B-10 Detector (AMANDA collaboration, Dahlberg *et al*.), *in* Proc. of the 26th ICRC, HE5.3.06 **2** 348.

Seasonal Variation of the Muon Flux Seen by AMANDA (AMANDA collaboration, Bouchta *et al.) in* Proc. of the 26th ICRC, HE3.2.11 **2** 108.

AMANDA Search for High-Energy Neutrinos Accompanying Gamma-Ray Bursts (AMANDA collaboration, Bay *et al.) in* Proc. of the 26th ICRC, E4.2.06 **2** 225.

Supernova Burst Analysis with the AMANDA Neutrino Telescope (AMANDA collaboration, Wischnewski *et al.) in* Proc. of the 26th ICRC, HE4.2.07 **2** 229.

A Search for Point Sources of High-Energy Neutrinos with the AMANDA Telescope (AMANDA collaboration, Kim *et al*.), *in* Proc. of the 26th ICRC, HE4.1.14 **2** 196.

Up- and Down-Going Muons in the AMANDA-B4 Prototype Detector (AMANDA collaboration, Hundertmark *et al*.) *in* Proc. of the 26th ICRC, HE3.1.06 **2** 12.

Search for Relativistic Monopoles with the AMANDA B-10 Detector (AMANDA collaboration, Niessen *et al*.), *in* Proc. of the 26th ICRC, HE5.3.05 **2** 348.

Performance of the AMANDA B-10 String Array (AMANDA collaboration, Hill *et al*.), *in* Proc. of the 26th ICRC, HE6.3.02 **2** 432.

Digital Optical Module & System Design for a km-Scale Neutrino Detector in Ice (AMANDA collaboration, Lowder *et al*.), *in* Proc. of the 26th ICRC, HE6.3.07 **2** 452.

Calibration of AMANDA with Coincident Events from SPASE-2 (SPASE and AMANDA collaborations, Miller *et al*.) *in* Proc. of the 26th ICRC, HE6.3.11 **2** 465.

Status of the RICE Experiment (RICE and AMANDA collaborations, Frichter *et al*.) in Proc. of the 26th ICRC, HE6.3.12 **2** 467.

Optical Properties of South Pole Ice at Depths of 1400 to 2300 Meters (AMANDA collaboration, Woschnagg *et al*.), in Proc. of the 26th ICRC, HE4.1.15 **2** 200.

The AMANDA-B10 String Array (AMANDA collaboration, Hill *et al*.), in Proc. of the 26th ICRC, HE6.3.02 **2** 432.

1997 – Durban, South Africa

Analysis of SPASE-AMANDA Coincidence Events (SPASE & AMANDA collaborations, Miller et al.), in Proc. of the 25th ICRC, **5** 237.

The Status of the AMANDA High-Energy Neutrino Detector (AMANDA collaboration, Barwick et al.), in Proc. of the 25th ICRC, **7** 1.

First Look at AMANDA-B Data (AMANDA collaboration, Tilav et al.), in Proc. of 25th ICRC, **7** 5.

Analysis of Cascades in AMANDA-A (AMANDA collaboration, Porrata et al.), in Proc. of the 25th ICRC, **7** 9.

Muon Reconstruction with AMANDA-B (AMANDA collaboration, Wiebusch et al.), in Proc. of the 25th ICRC, **7** 13.

Iceshow: A Monte Carlo Generator of Particle Showers in Ice (with C.G.S. Costa), in Proc. of the 25th ICRC, **7** 133.

1995 – Rome, Italy

Status and Capabilities of AMANDA-94 (with P.C. Mock *et al.)*, *in* Proc. of the 24th ICRC, **1** 758.

A System to Search for Supernova Bursts with the AMANDA Detector (with R. Wischnewski *et al.)*, *in* Proc. of the 24th ICRC, **1** 658.

Measurements of the Absorption Length of the Ice at the South Pole in the Wavelength Interval 410 nm to 610 nm (with B. Erlandsson *et al.)*, *in* Proc. of the 24th ICRC, **1** 1039.

Indirect Evidence for Long Absorption Lengths in Antarctic Ice (with S. Tilav *et al.)*, *in* Proc. of the 24th ICRC, **1** 1011.

Optical Properties of South Pole Ice for Neutrino Astrophysics (with P.B. Price *et al.)*, *in* Proc. of the 24th ICRC, **1** 777.

The Design of a Neutrino Telescope Using Natural Deep Ice as a Particle Detector (with L. Gray *et al.)*, *in* Proc. of the 24th ICRC, **1** 816.

SPASE–AMANDA Coincidences at the South Pole (with T.K. Gaisser *et al.)*, *in* Proc. of the 24th ICRC, **2** 768.

Remote Surveys of AMANDA (with P. Askebjer *et al.)*, *in* Proc. of the 24th ICRC, **1** 1009.

Using Extra-Clear Antarctic Ice as a Supernova Detector (with J.E. Jacobsen and E. Zas), *in* Proc. of the 24th ICRC, **1** 1027.

Neutrinos from Primordial Black Holes (with B. Keszthelyi and E. Zas), *in* Proc. of the 24th ICRC, **1** 682.

Cosmic-Ray Rapidity Density Distributions and Super-Families (with C.G.S. Costa and C. Salles) *in* Proc. of the 24th ICRC, **1** 155.

Measurement of the Absorption Length of the Ice at the South Pole in the Wavelength Interval 410 nm to 610 nm (with B. Erlandsson *et al.) in* Proc. of the 24th ICRC, **1** 1039.

1993 – Calgary, Alberta

AMANDA: Design of a 1-Kilometer–Deep, High-Energy Neutrino Telescope (AMANDA collaboration, S. Tilav *et al*.), *in* Proc. of 23rd Intl. Cosmic Ray Conference, **4** 561.

Surface/Under-Ice Muon Coincidences at the South Pole (with S. Tilav *et al*.), *in* Proc. of 23rd ICRC, **4** 565.

AMANDA: Measurement of South Pole Ice Transparency at 800-Meter Depth (AMANDA collaboration, T. Miller *et al*.), *in* Proc. of 23rd ICRC, **4** 557.

Hardware Design and Prototype Tests of the AMANDA Neutrino Detector (AMANDA collaboration, D. M. Lowder *et al.)*, *in* Proc. of 23rd ICRC, **4** 569.

The GRO/Whipple Observation of Blazars: Implications for Neutrino Astronomy (with R. Vázquez), *in* Proc. of 23rd ICRC, **1** 447.

Neutrino Astronomy: The Role of Horizontal Showers (with E. Zas and R. Vázquez), *in* Proc. of 23rd ICRC, **4** 434.

Empirical Determination of the Very High Energy Heavy Quark Cross Section from Horizontal Air Showers (w/M. González-García *et al*.), *in* Proc. of 23rd ICRC, **4** 613.

International Cosmic Ray Conference (ICRC) Proceedings

1991 – Dublin, Ireland

Indirect Detection of Dark Matter Using Neutrino Telescopes (with T. Stelzer), *in* Proc. of the 22nd International Cosmic Ray Conference, (Dublin Institute for Advanced Studies), **4** 726.

Radiation from Cosmic-Ray Interactions in the Galaxy (with T. Gaisser and M. Stanev), *in* Proc. of the 22nd ICRC, **1** 564.

AMANDA: Measurement of Polar Ice Transparency by Muon Observation (AMANDA collaboration, D.M. Lowder *et al.)*, *in* Proc. of the 22nd ICRC, **4** 654.

AMANDA: Antarctic Muon and Neutrino Detector Array (AMANDA collaboration, S. Barwick *et al*.), *in* Proc. of the 22nd ICRC, **4** 658.

Radiodetection of High-Energy Neutrinos: Monte Carlo Simulation of Pulses in Ice (with M. Stanev and E. Zas), *in* Proc. of the 22nd ICRC, **4** 686.

Separating Gamma-Ray Signals by Cherenkov Imaging: Neural Network Optimization (with R. Vázquez and E. Zas), *in* Proc. of the 22nd ICRC, **1** 504.

1990 – Adelaide, Australia

Muon Number Fluctuations in Air Showers (with T.K. Gaisser *et al*.), *in* Proc. of the 21st International Cosmic Ray Conference, **9** 146.

Collinear Halos (with D. Morris), *in* Proc. of the 21st ICRC, **8** 18.

Photoproduction Threshold: Its Implications for Air Showers (with T. K. Gaisser *et al*.), *in* Proc. of the 21st ICRC, **9** 142.

Isotropic TeV Gamma-Ray Background (with R. J. Protheroe *et al*.), *in* Proc. of the 21st ICRC, **2** 399.

High Energy Interactions, *in* Proc. of the 21st ICRC, **12** 101.

1985 – La Jolla, California

Muons in Gamma Showers (with T. Stanev and C. Vankov), *in* Proc. of the 19th International Cosmic Ray Conference, **7** 219.

Constraints on Cosmic Ray Observation of Cygnus X3 (with M. V. Barnhill III *et al*.), *in* Proc. of the 19th ICRC, **1** 99.

QCD-Motivated Description of Very–High-Energy Particle Interactions, *in* Proc. of the 19th ICRC, **6** 47.

1981 – Paris, France

Gammaization of Hadron Collisions, *in* Proc. of the 17th Intl. Cosmic Ray Conf. HE6-11 392.

Studying the Quark-Gluon Structure of Hadrons with Cosmic Rays, *in* Proc. of the 17th ICRC.

1975 – Munich, Germany

Cross Sections for Production of New and Massive Hadrons at Cosmic Ray Energies (with T.K. Gaisser), *in* Proc. of the 14th Intl. Conference on Cosmic Ray Physics.

High Transverse Momentum Secondaries in 10^4 GeV Cosmic Ray Interactions and Models of Large p_T Events (with T.K. Gaisser) *in* Proc. of the 14th ICRC.

On the Relation between Proton-Proton and Proton-Nucleus Cross Sections at Very High Energies (with T.K. Gaisser *et al*.), *in* Proc. of the 14th ICRC.

Duality and Backward Peaks in High Energy Phenomenology, ed. T.T. Van, Proc. of the 6th Rencontres de Moriond sur les Interactions Electromagnétiques, Meribel, France, C71037 65 (1971).

Crossed Channel Quantum Numbers (with J. Mandula et al.), Proc. of the Workshop on Particle Physics at Intermediate Energies, California Institute of Technology, Pasadena (1971).

Tracing Partons in Hadron Collisions at High Transverse Momentum, Proc. of the 8th Rencontres de Moriond, Meribel, France (1973).

Theoretical Interpretation of Experiments with Polarized Proton Beams, Proc. of the Summer Study on High Energy Physics with Polarized Beams, ANL-HEP 75-02 (1974).

Vector Mesons and Direct Leptons (with W. Long), BNL Workshop on Charm and Direct Leptons, Upton, New York (1975).

$\bar{p}p$ Storage Rings (with E.A. Paschos et al.), Proc. of the 1975 ISABELLE Summer Study, Upton, New York (1975).

Hadron Collisions above 10 TeV or Guessing Particle Physics at New Accelerators, Proc. of the VII Intl. Colloquium on Multi-Particle Reactions, Tutzing, Germany (1976).

Polarization Experiments—A Theoretical Review, Proc. of Orbis Scientiae, *ed.* Academic Press, U. of Miami, Coral Gables, Florida (1977).

Perturbative Chromodynamics, Proc. of the XVIXth Intl. Conf. on High Energy Physics, Tokyo, Japan (1978).

Hadronic Production of Charmed and Other Favorite Particles, Proc. of the Topical Conf. on Cosmic Rays and Particle Physics above 10 TeV, U. of Delaware, Newark (1978); American Institute of Physics **49** 261 (1979).

Signatures of Quantum Chromodynamics, Proc. of the Seminar on the Occasion of the 70th Birthday of L.P. Boekaert, U. of Louvain, Belgium (1979).

Intermediate Boson Production in QCD, Proc. of VIth Intl. Workshop on Weak Interactions with Very High Energy Beams, *ed.* K.E. Lassila and B.L. Young, Iowa State U., Ames, IO (1979).

Production of Heavy Flavors above 10 TeV (with T.K. Gaisser and T. Stanev), Proc. of the Workshop on the Production of New Particles in Super–High-Energy Collisions, Madison, Wisconsin (1979).

Energy Flow: Testing QCD without Structure Functions (with D.M. Scott), Proc. of the XIth Intl. Symposium on Multiparticle Dynamics, Brugge, Belgium (1980).

Direct Photons (with D.M. Scott), Proc. of the XXth Intl. Conf. on High Energy Physics, Madison, Wisconsin (1980).

New Quark and Weak Boson Signatures at $\bar{p}p$ Colliders (with D.M. Scott), Proc. of the XXth Intl. Conf. on High Energy Physics, Madison, Wisconsin (1980).

Evidence for Gluon Radiation in High-Energy Neutrino Interactions (LBL, Fermilab, Hawaii, Washington and Wisconsin collaboration), Proc. of the XXth Intl. Conf. on High Energy Physics, Madison, Wisconsin (1980).

Prompt Muons in Very–High-Energy Cosmic Rays, Proc. of the Workshop on Muons and Multimuons in Cosmic Rays, Dumand Intl. Symposium, Honolulu, Hawaii (1980).

Gammaization of Hadron Interactions, Proc. of the Intl. Seminar on Cosmic Ray Cascades, Sofia, Bulgaria (1980).

Lepton Pair Production at High Transverse Momentum (with D.M. Scott), Proc. of the Moriond Workshop on Lepton Pair Production, Les Arcs, Savoie, France (1981).

Direct Photons: Second-Generation Experiments, Proc. of the Workshop on Direct Photon Experiments, Fermilab, Batavia, Illinois (1981).

Flavor Excitation of Charm, Beauty and Higgs Particles: The Forgotten Diagrams, Proc. of the Moriond Workshop on Heavy Flavors, Les Arcs, Savoie, France (1982).

Formation and Signature of Quark Matter in Heavy Ion Collisions, Proc. of the Workshop on Very High Energy Physics, Paris, France (1982).

Proton-Antiproton Colliders Confront the Standard Model, Proc. of Conf. on Physics of the 21st Century, U. of Arizona, Tucson (1983).

The Search for New Flavors, Proc. of the Fourth Topical Workshop on Proton Antiproton Collider Physics, U. of Bern, Switzerland (1984).

Transverse Momenta: Colliders and Cosmic Rays, Proc. of the Intl. Symposium on Cosmic Rays and Particle Physics, Tokyo, Japan (1984).

QCD Collider Physics, Proc. of the XVth Symposium on Multi-Particle Dynamics, Lund, Sweden (1984).

QCD Working Group (with H. Boggild et al.), at $\bar{p}p$ Options for the Supercollider, DPF Workshop sponsored by Argonne Natl. Lab. and the U. of Chicago (1984).

Stable Quark Matter, Proc. of the Conf. on Cosmic-Ray and High-Energy–Gamma-Ray Experiments for the Space Station Era, Louisiana State U., Baton Rouge (1984).

Muons in Gamma Showers from Cygnus X-3 (with T. Stanev and T.K. Gaisser), Proc. of the Conf. on Cosmic Ray and High Energy Gamma Ray Experiments for the Space Station Era, Louisiana State U., Baton Rouge (1984).

Cross Sections in the Multi-TeV Range (with T.K. Gaisser), Proc. of the Aspen Winter Physics Conf., Aspen Colorado (1985).

Constraints on the Cosmic-Ray Observation of Cygnus X-3 (with M.V. Barnhill et al.), Proc. of the New Particles ’85 Conf., Madison, Wisconsin (1985).

High Energy Muon Interactions in Matter (with R.K. Adair et al.), Proc. of the Workshop on Muon Detection, Madison, Wisconsin (1985), *ed.* D. Cline and L. Pondrom.

Hadroproduction of Heavy Flavors, Proc. of the Heavy Quark Workshop, Fermilab (1985), *ed.* J. Slaughter.

Not Understanding Cygnus X-3, Proc. of the Intl. Europhysics Conf. on High-Energy Physics, Bari, Italy (1985).

Counting Neutrinos with Monojets, Proc. of the Intl. Europhysics Conf. on High-Energy Physics, Bari, Italy (1985).

The Status of Perturbative QCD (An Update), Proc. of the Annual Mtg. of the APS Division of Particles and Fields, Eugene, Oregon (1985), *ed.* R.C. Hwa (World Scientific, 1986) 529.

Cosmic-Ray Observations of Cygnus X-3: Some Theoretical Implications (with T.K. Gaisser), Proc. of the VIth Astrophysics Meeting, Les Arcs, France (1986).

Cosmic Accelerators, Proc. of the First Aspen Winter Physics Conf., Aspen, Colorado, *ed.* M.M. Block (Academy Press, 1986).

Comments on Minijets (with C.S. Kim and J.R. Cudell), Proc. of Physics Simulations at High Energies, Madison, Wisconsin (World Scientific, 1986).

On the Discovery of Very–High-Energy Point Sources, Proc. of the Stanford Summer Institute on Particle Physics, SLAC, Stanford, California (1986).

A Combined Cosmic-Ray Muon Spectrometer and High-Energy Air-Shower Array (with D. Ayres and M. Cherry), Proc. of the 1986 Summer Study on the Physics of the SSC, Snowmass, Colorado, 655 (1987).

QCD and “Millibarn” Physics at Hadron Colliders, Proc. of the La Thuile Meeting on Results and Perspectives on Particle Physics, La Thuile, Aosta, Italy (1987).

Top Search, Proc. of the 7th Intl. Conf. on Physics in Collision, Tsukuba, Japan (Editions Frontières, 1987).

Cosmic Accelerators: A New Era of Cosmic Ray Astrophysics and Particle Physics, Proc. of the Conf. on Particle Physics and Neutrino Astronomy, Institute for Cosmic-Ray Research, U. of Tokyo, Japan (1987), *ed.* K. Kasahara.

Non-Accelerator Particle Physics: Some Recent Results, Proc. of the 12th Johns Hopkins Workshop on Current Problems in Particle Physics, Baltimore, Maryland (1988).

Gluon Interactions and Diffraction (with B. Margolis and P. Valin), Proc. of the Tenth Annual Theory Meeting, U. of Toronto, Canada (1988).

High Energy Neutrino Detection in Deep Polar Ice (with J.G. Learned), Proc. of the 5th Intl. Symposium on Very–High-Energy Cosmic-Ray Interactions (ISVEHCRI), Lodz, Poland (1988).

From Hard to Soft Collisions: A (QCD) Guided Tour of the Transverse Momentum Spectrum, Proc. of the 5th ISVEHCRI, Lodz, Poland (1988).

Top Search at the TeVatron, Proc. of the APS Meeting of the Division of Particles and Fields, Storrs, CT, *ed.* K. Haller et al., World Scientific 443 (1988).

TeV / PeV Astronomy: The Importance of Muons, Proc. of the Particle Astrophysics Workshop, Berkeley, California, World Scientific (1988).

Neutrino Detection in Clear Polar Ice (with R. March and J.G. Learned), Proc. of the Workshop on Neutrino Telescopes, Venice, Italy (1988).

QCD-Inspired Model of Very High Energy Interactions, Proc. of the Cosmic-Ray Simulation Workshop, Salt Lake City, Utah (1989).

Forward Scattering Amplitudes in Semi-Hard QCD (with B. Margolis et al.), Proc. of the Intl. Symposium "Hadron Interactions—Theory and Phenomenology," Bechyne, Czechoslovakia, *ed.* J. Fisher et al., Prague U. Press 3 (1988).

Cosmic Accelerators: A New Era of Cosmic-Ray Astrophysics and Particle Physics, Proc. of the 4th INFN Eloisatron Workshop "New Aspects of High-Energy Proton-Proton Collisions," Erice, Italy (1988), *ed.* A. Ali, Plenum Press 401 (1989).

Neutrino Astronomy, Proc. of the Astrophysics in Antarctica Conf., Newark, Delaware, *ed.* M.A. Pomerantz et al., AIP Conf. Proc. **198** 24 (1989).

A South Pole Facility to Observe Very–High-Energy Gamma-Ray Sources (Bartol, Purdue, Harvard, Smithsonian and Wisconsin university collaboration), Proc. of the Astrophysics in Antarctica Conf., Newark, Delaware, *ed.* M.A. Pomerantz et al., AIP Conf. Proceedings **198** 39 (1989).

Gluon Interactions and Diffraction, Proc. of the International Conf. on Elastic and Diffractive Scattering, Northwestern U., *ed.* M.M. Block and A.R. White, Nucl. Phys. B **12** 31 (1990).

On the Gluon Structure of High-Energy Hadrons and Their Interactions, Proc. of the Intl. Conf. on Elastic and Diffractive Scattering, Northwestern U., *ed.* M.M. Block and A.R. White, Nucl. Phys. B **12** 238 (1990).

Gamma-Ray Astronomy: The Particle Physics Connection, Proc. of the Workshop on Physics and Experimental Techniques of High-Energy–Neutrino and VHE– and UHE–Gamma-Ray Particle Astrophysics, Little Rock, Arkansas (1989), *ed.* G.B. Yodh and D.C. Wold, Nucl. Phys. B A **14** 60 (1990).

TeV Atmospheric Cherenkov Telescope at the South Pole (Bartol, Purdue, Harvard, Smithsonian and Wisconsin university collaboration), Proc. of the Workshop on Physics and Experimental Techniques of High-Energy–Neutrino and VHE– and UHE–Gamma-Ray Particle Astrophysics, Little Rock (1989), *ed.* G.B. Yodh and D.C. Wold, Nucl. Phys. B A **14** 265 (1990).

Proton Structure from $p\ \bar{p}$ Colliders (with S. Keller), Proc. of the Workshop on Hadron Structure Functions and Parton Distributions, Fermilab (1990).

Top Quark Mass from the Muon Lifetime (with D.A. Morris), Proc. of the 12th Annual Montreal-Rochester-Syracuse-Toronto Meeting, *ed.* B. Margolin and P. Valin, McGill U. Press (1990).

Top Quark Mass from the Muon Lifetime (with D.A. Morris), Proc. of the X^{th} Intl. Conf. on Physics in Collision, Duke U., Durham, North Carolina, Editions Frontières (1990).

Deep Antarctic Ice as a Neutrino Telescope (with S. Barwick), Proc. of the Summer Study of High-Energy Physics, "Research Directions for the Decade," Snowmass, Colorado, World Scientific (1990).

The Highest-Energy Diffuse Cosmic Gamma Rays, Proc. of the Conf. on Astrophysical Aspects of the Most-Energetic Cosmic Rays, Kofu, Japan, World Scientific (1990).

Greenland 90: A First Step Toward Using the Polar Ice Cap as a Cherenkov Detector, Proc. of Trends in Astroparticle Physics, U. of California, Los Angeles (1990).

Observation of Muons Using Ice as a Particle Detector, Proc. of the 3^{rd} Intl. Workshop on Neutrino Telescopes, Institute Veneto di Scienze, Lettere ed Arti, Venice, Italy, *ed.* M. Baldo-Ceolin (1991).

Neutrino Astronomy on the 1-km^2 Scale, Proc. of the 3^{rd} Intl. Workshop on Neutrino Telescopes, Venice, Italy, *ed.* M. Baldo-Ceolin (1991).

The Standard Electroweak Model: Quantum Corrections and Symmetry Breaking, Proc. of the VI^{th} Jorge André Swieca Summer School, São Paolo, Brazil (1991).

Physics Capabilities of Underground Detectors, Proc. of the Workshop on Long-Baseline Neutrino Oscillations, Fermilab (1991).

The New Astronomy, Proc. of the Division of Particles and Fields meeting, Vancouver, British Columbia (1991), *ed.* D.A. Axen et al., World Scientific 241 (1992).

Indirect Detection of Dark Matter Using Neutrino Telescopes (with T. Stelzer), Proc. of Particle Physics from Underground to Heaven, Johns Hopkins U., Baltimore, Maryland (1991), *ed.* S. & G. Domokos, World Scientific (1992).

Transparency of Antarctic Ice: First Results (AMANDA collaboration), Proc. of the High- Energy Neutrino Astrophysics Workshop, Honolulu, Hawaii, *ed.* V.J. Stenger et al., World Scientific 291 (1992).

AMANDA South Pole Neutrino Detector (AMANDA collaboration, S. Barwick et al.), Proc. of the XXVI Intl. Conf. on High Energy Physics, SMU, Dallas, Texas, *ed.* J.R. Sanford, AIP Conf. Proc. **272** 1250 (1992).

Antarctic Muon and Neutrino Detector Array (AMANDA collaboration, S. Barwick et al.), Proc. of the 4th Intl. Workshop on Neutrino Telescopes, Instituto Veneto di Scienze, Lettere ed Arti, Venice, Italy, *ed.* M. Baldo-Ceolin, U. of Padua (1992).

Limits on AGN Neutrino Fluxes from Horizontal Air Shower Measurements (with E. Zas), Proc. of the High-Energy Neutrino Astrophysics Workshop, Honolulu, Hawaii, *ed.* V. Stenger et al., World Scientific 186 (1992).

TeV to EeV Diffuse γ-Rays and Neutrinos, Proc. of the Palaiseau Workshop: Towards a Major Atmospheric Cherenkov Detector for TeV Astroparticle Physics, École Polytechnique, Palaiseau, France, Editions Frontières 85 (1992).

Rapidity Gaps and Electroweak Processes (with H. Chechime et al.), Proc. of the Workshop on Small-*x* and Diffractive Physics at the TeVatron, Fermilab (1992).

Rapidity Gap Physics with FAD (with H. Chechime et al.), Proc. of the Workshop on Small-*x* and Diffractive Physics at the TeVatron, Fermilab (1992).

AMANDA South Pole Neutrino Detector (with S. Barwick et al.), Proc. of the Intl. Symposium on Neutrino Astrophysics, Takayama/Kamioka, Japan, *ed.* Y. Suzuki and K. Nakamura, Universal Academy Press (1992).

Are Blazars Guaranteed High-Energy Neutrino Sources? (with R. Vázquez), Proc. of the Intl. Symposium on Neutrino Astrophysics, *ed.* Y. Suzuki and K. Nakamura, Universal Academy Press (1992).

Cross Sections at the SSC and LHC (with M.M. Block and B. Margolis), Proc. of the Rencontres de Moriond, Les Arcs, Savoie, France (1992), *ed.* J.T.T. Van, Edition Frontières (1993).

Antarctic Muon and Neutrino Detector Array (AMANDA collaboration), Proc. of the 2nd Intl. Conf. on Gamma-Ray and Neutrino Cosmology, Gamma Ray – Neutrino Cosmology and Planck Scale Physics, UCLA (1992), *ed.* D.B. Cline, World Scientific 235 (1993).

Charm Production in Non-Accelerator Experiments (with E. Zas and R. Vázquez), Proc. of the XXII Intl. Symposium on Multiparticle Dynamics, Santiago de Compostela, Spain (1992), *ed.* C. Pajares, World Scientific (1993) 154.

Small-*x* Behavior in DIS, Lepton Pair and Heavy Flavor Production in Nuclear Targets (with M.B. Gay Ducati and M.A. Doncheski), Proc. of Particles and Fields, Fermilab (1992), *ed.* C. Albright et al., World Scientific **2** 1135 (1993).

Observation of TeV Photons from Markarian 421: Implications for Neutrino Astronomy (with R. Vázquez), Proc. of Particles and Fields, Fermilab (1992), World Scientific **2** 1394 (1993).

QCD Structure of Quarkonium Spin Spectra (with C. Olson et al.), Proc. of Particles and Fields, Fermilab, World Scientific **1** 524 (1993).

A Full Acceptance SSC Detector: The Cosmic Ray Connection, Proc. of the 7th Intl. Symposium on Very–High-Energy Interactions, Ann Arbor, Michigan, *ed.* L. Jones, AIP Conf. Proc. **276** 679 (1993).

Conference Presentations and Proceedings

High-Energy Neutrino Astronomy: Towards a 1 km^3 Detector (with J.G. Learned), Proc. of the 5th Intl. Workshop on Neutrino Telescopes, Instituto Veneto di Scienze, Lettere ed Arti, Venice, Italy, *ed.* M. Baldo-Ceolin, U. of Padua (1993).

The AMANDA Neutrino Astronomy Project (with R.M. Morse et al.), Proc. of the 5th Intl. Workshop on Neutrino Telescopes, Venice, Italy, U. of Padua 309 (1993).

The Charm Content of *W* + 1-Jet Events as a Probe of the Strange Quark Distribution Function (with U. Baur et al.), Proc. of the Workshop on Physics at Current Accelerators and the Supercollider, Argonne, IL, *ed.* J.L. Hewett et al. (1993).

Muons in γ-ray Air Showers and the Photoproduction Cross Section (with R.S. Fletcher and T.K. Gaisser), Proc. of the IInd Intl. Conf. on Trends in Astrophysics, Aachen, Germany (1991), *ed.* P. Bosetti, TEUBNER-TEXT zur Physik 179 (1994).

AMANDA: Antarctic Muon and Neutrino Detector Array (with S. Barwick et al.), Proc. of the IInd Intl. Conf. on Trends in Astrophysics, Aachen, Germany (1991), TEUBNER-TEXT zur Physik 211 (1994).

High Energy Behavior of δ_{tot}, ρ and β — Asymptotic Amplitude Analysis and a QCD-Inspired Analysis (with M.M. Block et al.), Proc. of the Intl. Conf. on Elastic and Diffractive Scattering, Vth Blois Workshop, Brown U., Providence, Rhode Island (1993), *ed.* H.M. Fried et al., World Scientific 205 (1994).

Astroparticle Physics with High Energy Neutrino Telescopes, Proc. of the 14th Intl. Workshop on Weak Interactions, Seoul, Korea (1993), *ed.* J.E. & S.K. Kim, World Scientific (1994).

Astroparticle Physics with High-Energy Neutrino Telescopes, Proc. of the 17th Johns Hopkins Workshop on Current Problems in Particle Theory, Particles and the Universe, Budapest, Hungary (1993), *ed.* Z. Horvath et al., World Scientific 191 (1994); hep-ph/9308373.

Analysis of the High-Energy Behavior of the Forward Scattering Parameters δ_{tot}, ρ and β (with M.M. Block et al.), Proc. of the XXIII Intl. Symposium on Multiparticle Dynamics, Aspen, Colorado (1993), *ed.* M.M. Block and A. White, World Scientific 373 (1994).

Gamma-Ray Astronomy at the South Pole (with S. Tilav et al.), Proc. of Calgary Workshop on Cherenkov Telescopes, U. of Calgary, Alberta (1993), *ed.* R. Lamb, U. of Calgary (1994).

Ultra–High-Energy Neutrino Astrophysics with AMANDA (AMANDA collaboration, P.B. Price et al.), Proc. of the Intl. Conf. on Non-Accelerator Particle Physics, Bangalore, India, *ed.* R. Cowsik, World Scientific 134 (1994).

High-Energy Neutrino Astronomy and Its Telescopes, Proc. of the CAM 94 Physics Meeting, Cancun, Mexico, *ed.* Z. Zepeda, World Scientific (1994).

Is the 3 X 10^{20} eV Fly's Eye Event a Neutrino?, Proc. of the 6th Intl. Workshop on Neutrino Telescopes, Instituto Veneto di Scienze, Lettere ed Arti, Venice, Italy, *ed.* M. Baldo-Ceolin, University of Padua (1994).

The Detection of Cold Dark Matter with Neutrino Telescopes (with J.E. Jacobsen), Proc. of MRST-94, *What Next? Exploring the Future of High-Energy Physics*, McGill U., Montreal, Canada, *ed.* J.R. Cudell et al., World Scientific 97 (1994); hep-ph/ 9406309.

High Energy Neutrino Astronomy and Its Telescopes, Proc. of XVth Brazilian Natl. Meeting on Particles and Fields, Angra dos Reis, Brazil, *ed.* S. Novaes (1994).

The Highest Energy Cosmic Ray, Proc. of the XIV Intl. Conf. on Physics in Collision, Tallahassee, Florida (1994) *ed.* S. Keller and H. Wahl, Editions Frontières (1995).

Initial Analysis of Coincident Events between the SPASE&AMANDA Detectors (SPASE-AMANDA collaboration, Miller et al.), Proc. of Trends in Astroparticle Physics, Stockholm, Sweden (1994), *ed.* L. Bergstrom et al., Nucl. Phys. B **43** 245 (1995).

Antarctic Muon and Neutrino Detector: First Data and Outlook (with J. Lynch et al.), Proc. of the Robotic Telescopes Conf. Astronomical Society of the Pacific, Flagstaff, Arizona (1994), *ed.* G.W. Henry et al., ASP Conf. Series **79** 205 (1995).

The Case for a Kilometer-Scale High-Energy Neutrino Detector, Proc. of Nuclear and Particle Astrophysics and Cosmology into the Next Millenium, Snowmass, Colorado (1994), *ed.* E.W. Kolb and R. Peccei, World Scientific 256 (1995).

The Indirect Detection of Halo Dark Matter (with J.E. Jacobsen), Proc. of the Intl. Symposium on Critique of the Sources of Dark Matter in the Universe, Santa Monica, California (1994), *ed.* D. Cline, World Scientific 212 (1995).

AMANDA: Status Report from the 1993-1994 Campaign and Optical Properties of the South Pole Ice (AMANDA collaboration, A. Goobar et al.), Proc. of the XVI Intl. Conf. on Neutrino Physics and Astrophysics, Eilat, Israel (1994), *ed.* A. Dar, Nucl. Phys. B **38** 287 (1995).

The Case for a Kilometer-Scale High-Energy Neutrino Detector, Proc. of the XVI Intl. Conf. on Neutrino Physics and Astrophysics, Eilat, Israel (1994), Nucl. Phys. B **38** 472 (1995).

The High-Energy Behavior of the Forward Scattering Parameters (with M.M. Block et al.), Proc. of the 24th Intl. Symposium on Multiparticle Dynamics, Vietri dul Mare, Italy (1994), *ed.* A. Giovannini et al., World Scientific 478 (1995).

High-Energy Neutrino Astronomy and Its Telescopes, Proc. of 7th Adriatic Meeting on Particle Physics: Perspectives in Particle Physics '94, Brijini Islands, Croatia (1994), *ed.* D. Klabucar et al., World Scientific 304 (1995).

The Direct and Indirect Detection of Weakly Interacting Dark Matter Particles, Proc. of the Intl. Symposium on Particle Theory and Phenomenology, Iowa State U. (1995), *ed.* K.E. Lassila et al., World Scientific 81 (1996).

1995-1996 Results for the AMANDA Neutrino Observatory (AMANDA collaboration, P.B. Price et al.), Proc. of the 7th Intl. Workshop on Neutrino Telescopes, Instituto Veneto di Scienze, Lettere ed Arti, Venice, Italy, *ed.* M. Baldo-Ceolin, U. of Padua 383 (1996).

The Case for a Kilometer-Scale High Energy Neutrino Detector, Proc. of the 7th Intl. Workshop on Neutrino Telescopes, Venice, Italy, U. of Padua (1996).

1995-1996 Results for the AMANDA Neutrino Observatory (AMANDA collaboration), Proc. of the Intl. Workshop on Future Prospects of Baryon Instability Search, Oak Ridge National Laboratory, *ed.* Y. Kamyshkov, ORNL-6910 (1996).

The AMANDA Experiment: Status and Prospects for Indirect Dark Matter Detection (AMANDA collaboration, Bergström et al.), Proc. of the Intl. Workshop on the Identification of Dark Matter (IDM 96), Sheffield, England, *ed.* N.J.C. Spooner, World Scientific 521 (1997); astro-ph/9612122.

Active Galaxies as Particle Accelerators, Proc. of VIIIth Rencontres de Blois: Neutrinos, Dark Matter and the Universe (1996), *ed.* T. Stolarczyk et al., Editions Frontières (1997).

Status of the AMANDA and Lake Baikal Neutrino Telescopes (AMANDA collaboration, Wiebusch et al.), Proc. of the 9th Intl. Symposium on Very–High-Energy Cosmic-Ray Interactions, Karlsruhe, Germany (1996), *ed.* H. Rebel et al., Nucl. Phys. B **52** 256 (1997).

The AMANDA Experiment (AMANDA collaboration, Hulth et al.), Proc. of the 17th Intl. Conf. on Neutrino Physics and Astrophysics (Neutrino 96), Helsinki, Finland, *ed.* K. Enqvist et al., World Scientific 518 (1997); astro-ph/9612068.

Active Galaxies as Particle Accelerators, Proc. of Neutrino 96, Helsinki, Finland, *ed.* K. Enqvist et al., World Scientific 503 (1997).

Status of the AMANDA South Pole Neutrino Detector (for the AMANDA collaboration), Proc. of the Intl. Workshop on Aspects of Dark Matter in Astrophysics and Particle Physics, Heidelberg, Germany (1996), *ed.* H.V. Klapdor-Kleingrothaus and Y. Ramachers, World Scientific (1997).

Latest Results from AMANDA (AMANDA collaboration, Price et al.), Proc. of the XXXIInd Rencontres de Moriond on Very–High-Energy Phenomena in the Universe, Les Arcs, France, *ed.* Y. Giraud-Heraud and J.T.T. Van, Editions Frontières 267 (1997).

Neutrino Astronomy with AMANDA (AMANDA collaboration, Wiebusch et al.), Proc. of the 4th SFB-375 Ringberg Workshop on Neutrino Astrophysics, Tegernsee, Germany, *ed.* M. Altmann et al. (1997); astro-ph/9801320.

Particle Astrophysics in Antarctica (SPASE and AMANDA collaborations, Miller et al.), in *Towards the Millennium in Astrophysics: Problems and Prospects,* Proc. of the Erice Summer School on Cosmic-Ray Physics, 1996, *ed.* M.M. Shapiro et al., World Scientific 157 (1998).

(No) Color in QCD: Charmonium, Charm and Rapidity Gaps (with O.J.P. Eboli and E.M. Gregores), Proc. of 26th Intl. Symposium on Multiparticle Dynamics (ISMD 96), Faro, Portugal, 1996, *ed.* A. Mourão et al., (World Scientific, 1998); hep-ph/9611258.

The Search for the Source of the Highest-Energy Cosmic Rays, Proc. of ISMD 96, Faro, Portugal, 1996, World Scientific 35 (1998).

Colorless States in Perturbative QCD: Charmonium and Rapidity Gaps (with J.F. Amundson et al.), Proc. of 9th Annual Mtg. of Division of Particles and Fields of the American Physical Society, Minneapolis, Minnesota, 1996, *ed.* H. Heller et al., World Scientific 874 (1998).

The AMANDA Neutrino Telescope, Proc. of COSMO 97: Particle Physics and the Early Universe, Ambleside, UK, 1997, *ed.* L. Roszkowski, World Scientific 100 (1998).

The AMANDA Neutrino Telescope, Proc. of the Intl. School of Nuclear Physics*, Neutrinos in Astro-, Particle and Nuclear Physics,* Erice, Italy, 1997, *ed.* A. Faessler, Progress in Particle and Nuclear Physics, **40** 377 (1998).

The AMANDA Neutrino Telescope and its Expansion to 1-Kilometer Dimension, Proc. of the Astronomical Society of the Pacific Summer Scientific Symposium Conf.*: Astrophysics from Antarctica*, Chicago (1997), *ed.* G. Novak and R.H. Landsberg, ASP Conf. Series **141** 368 (1998).

The AMANDA Neutrino Telescope: Science Prospects and Performance at First Light, Proc. of the Workshop on Fundamental Particles and Interactions*: Frontiers in Contemporary Physics*, Vanderbilt U., Nashville, Tennessee (1997), *ed.* R.S. Panvini and T.J. Wieler, AIP Conf. Proc. **23** 154 (1998).

The AMANDA Neutrino Telescope, Proc. of the First Intl. Conf. on Particle Physics beyond the Standard Model, Castle Ringberg, Germany (1997), *ed.* H.V. Klapdor-Kleingrothaus and H. Päs, IOP Publishing 956 (1998).

The AMANDA Neutrino Telescope, Proc. of the Symposium in Honor of Buford Price, Berkeley, California, 1997, New Astronomy Review **42** 289 (1998).

The AMANDA Neutrino Telescope: Science Prospects and Performance at First Light, Proc. of the XVI Intl. Workshop on Weak Interactions and Neutrinos, Capri, Italy (1997), *ed.* G. Fiorillo et al., Nucl. Phys. B **66** 155 (1998).

Large Natural Cherenkov Detectors: Water and Ice, Proc. of the 5th Intl. Workshop on Topics in Astroparticle and Underground Physics, Gran Sasso, Italy, (1997), *ed.* A. Bottino et al., Nucl. Phys. B **70** 409 (1998).

Are Two Gluons the QCD Pomeron? (with O.J.P. Eboli and E.M. Gregores), Proc. of the XXVII Intl. Symposium on Multiparticle Dynamics (ISMD 97), Frascati, Italy, *ed.* G. Capon et al., Nucl. Phys. B **70** 409 (1998).

Large Natural Cherenkov Detectors: Water and Ice, Proc. of the Workshop on Observing Giant Cosmic-Ray Air Showers from (>10^{20} eV) Particle from Space (OWL Workshop), College Park, Maryland (1997), *ed.* J. Krizmanic et al., AIP Conf. Proc. **433** 265 (1998).

The AMANDA Neutrino Telescope and the Indirect Search for Dark Matter (for the AMANDA collaboration), Proc. of the 3rd Intl. Symposium on Sources and Detection of Dark Matter in the Universe (DM98), Marina del Ray, California, Phys. Reports **307** 243 (1998); hep-ex/9804007.

Preliminary Results from the AMANDA Neutrino Telescope (AMANDA collaboration, de los Heros et al.), Proc. of the 16th European Cosmic-Ray Symposium, Alcalá de Henares, Spain, *ed.* José Medina, Univ. of Alcalá (1998).

Status of the AMANDA Experiment (AMANDA collaboration, Hulth et al.), Proc. of the 5th Intl. Workshop on Topics in Astroparticle and Underground Physics (TAUP 97), Gran Sasso, Italy, *ed.* A. Bottino et al., Nucl. Phys. B **70** 448 (1999).

The AMANDA Neutrino Telescope (for the AMANDA collaboration), Proc. of 18th Intl. Conf. on Neutrino Physics and Astrophysics (Neutrino 98), Takayama, Japan, *ed.* Y. Suzuki and Y. Totsuka, Nucl. Phys. B **77** 474 (1999).

Initial Results from the AMANDA High-Energy Neutrino Detector (AMANDA collaboration, Barwick et al.), Proc. from the 29th Intl. Conf. on High-Energy Physics (ICHEP '98), Vancouver, BC, *ed.* A. Astbury, D. Axen and J. Robinson, World Scientific **II** 1447 (1999).

The AMANDA Neutrino Detector (AMANDA collaboration, Wischnewski et al.), Proc. of 10th Intl. Symposium on Very–High-Energy Cosmic-Ray Interactions, Gran Sasso, Italy (1998), *ed.* O. Saavedra and A. Castellina, Nucl. Phys. B **75** A, 412 (1999).

The AMANDA Neutrino Telescope (AMANDA collaboration, Bergström et al.), Proc. of the Second Intl. Workshop on the Identification of Dark Matter (IDM98), Buxton, England, *ed.* N.J.C. Spooner and V. Kudryavtsev, World Scientific 501 (1999).

Lectures on Neutrino Astronomy: Theory and Experiment, Proc. of the TASI 98 Summer School*, Neutrinos in Physics and Astrophysics: From 10^{-33} to 10^{28}cm*, Boulder, Colorado (1998), *ed.* P. Langacker, World Scientific 524 (1999).

Are Two Gluons the QCD Pomeron? (with O.J.P. Eboli and E.M. Gregores), Proc. of the 29th Intl. Conf. on High-Energy Physics (ICHEP98), Vancouver, British Columbia (1998), *ed.* A. Astbury et al., World Scientific **1** 940 (1999).

A Tour Guide to High Energy *pp*, $\bar{p}p$, γp and $\gamma\gamma$ Scattering (with M.M. Block et al.), Proc. of the 4th Workshop on Quantum Chromodynamics, Paris, France (1998), *ed.* H.M. Fried and B. Mueller, World Scientific 49 (1999).

AMANDA: Status, Results and Future (AMANDA collaboration, Spiering et al.), Proc. of the 8th Intl. Workshop on Neutrino Telescopes, Venice, Italy, *ed.* M. Baldo Ceolin, U. of Padua (1999); astro-ph/9906205.

Breaking the Barriers—Uniting Accelerator and Cosmic-Ray p-p Cross Sections (with M.M. Block et al.), Proc. of the 25th Pamir-Chacaltaya collaboration Workshop, Lodz, Poland (1999); hep-ph/0003226.

Neutrino Astronomy and the AMANDA South Pole Telescope, Proc. of the Intl. School of Cosmic-Ray Astrophysics*, 11th Course: New Vistas in Astrophysics*, Erice, Italy (1998), *ed.* M.M. Shapiro et al., World Scientific (2000) 3.

Observation of Atmospheric-Neutrino Events with the AMANDA Experiment (AMANDA collaboration, Karle et al.), Proc. of the 17th Intl. Workshop on Weak Interactions and Neutrinos (WIN99), Cape Town, South Africa, *ed.* C.A. Dominguez and R.D. Viollier, World Scientific (2000) 258; astro-ph/9904379.

High-Energy Neutrino Astronomy, Proc. of WIN99, Cape Town, South Africa, World Scientific (2000) 123.

The AMANDA Neutrino Detector – Status Report (AMANDA collaboration, Wischnewski et al.), Proc. of Sixth Topical Seminar on Neutrino and Astro-Particle Physics, San Miniato, Italy (1999), *ed.* G. Bruni et al., Nucl. Phys. B **85** 141 (2000).

High-Energy Neutrino Astronomy, Proc. of the 23rd Johns Hopkins Workshop on Current Problems in Particle Theory*: Neutrinos in the Next Millenium*, Baltimore, Maryland (1999), *ed.* G. Domokos and S. Kovesi-Domokos, World Scientific 1 (2000).

From AMANDA to IceCube: Current and Future High-Energy Neutrino Telescopes at the South Pole (AMANDA collaboration, Miller et al.), Proc. of the 23rd Johns Hopkins Workshop on Current Problems in Particle Theory, Baltimore, Maryland (1999), World Scientific 47 (2000).

Initial Results from the AMANDA High-Energy Neutrino Detector (AMANDA collaboration, Barwick et al.), Proc. of the Sixth Intl. Workshop on Topics in Astroparticle and Underground Physics (TAUP 1999)*,* Paris, France, *ed.* J. Dumarchez et al., Nucl. Phys. B **87** 402 (2000).

From AMANDA Neutrinos to a Kilometer-Scale Observatory (AMANDA collaboration, Karle et al.), Proc. of the Intl. Workshop on Next-Generation Nucleon Decay and Neutrino Detector (NNN99), Stony Brook, NY, *ed.* M. Diwan and C.K. Jung, AIP Conf. Proc. **533** (2000).

High-Energy Neutrino Astronomy, Proc. of the 7th Intl. Symposium on Particles, Strings, and Cosmology (PASCOS 99), Lake Tahoe, California (1999), *ed.* K. Cheung et al., World Scientific 349 (2000).

Extending the Frontiers—Reconciling Accelerator and Cosmic-Ray p-p Cross Sections (with M.M. Block and T. Stanev), Proc. of the 5th Workshop on QCD, Villefranche-sur-Mer, France, *ed.* H.M. Fried et al., Quantum Chromodynamics 84-91 (2000).

Observation of High-Energy Atmospheric Neutrinos with AMANDA (AMANDA collaboration, Karle et al.)*,* Proc. of 7th Conf. on Intersections Between Particle and Nuclear Physics (CIPANP 2000), Quebec City, *ed.* Z. Parsa & W. Marciano, AIP Conf. Proc. **549** 823 (2000).

High-Energy Neutrino Astronomy: Towards Kilometer-Scale Detectors, Proc. of the Intl. School of Astrophysics *D. Chalonge, 7th Course: Current Topics in Astrofundamental Physics*, Erice, Italy (1999), *ed.* N.G. Sanchez, Kluwer Academic Press 585 (2001).

The AMANDA Neutrino Telescope: Status and Perspectives (AMANDA collaboration, de los Heros et al.), Proc. of the 11th Rencontres de Blois: *Frontiers of Matter,* Chateau de Blois, France (1999), *ed.* J.T.T. Van, Thé Gió'i Publishers (2001).

Status of the Neutrino Telescope AMANDA: Monopoles and WIMPS (AMANDA collaboration, Rhode et al.), Proc. of Third Intl. Conf. on Dark Matter in Astro- & Particle Physics (DARK 2000), Heidelberg, Germany, *ed.* H.V. Klapdor-Kleingrothaus, Springer-Verlag 699 (2001).

High-Energy Neutrino Astronomy: Toward Kilometer-Scale Detectors, Proc. of the Intl. Symposium on High-Energy Gamma-Ray Astronomy, Heidelberg, Germany (2000), *ed.* F. Aharonian and H. Voelk, AIP Conf. Proc. **558** 43 (2001).

Recent Results from AMANDA (AMANDA collaboration, Cowan et al.), Proc. of the Division of Particle Physics and Fields of the American Physical Society (DPF2000), Columbus, Ohio, Intl. J. Mod. Phys. A **16**, Suppl 1C 1013 (2001).

Results from the AMANDA High-Energy Neutrino Detector (AMANDA collaboration, Barwick et al.), Proc. of the 19th Intl. Conf. on Neutrino Physics and Astrophysics—*Neutrino 2000*, Sudbury, Ontario, Nucl. Phys. B **91** 423 (2001); astro-ph/0009242.

Selected Recent Results from AMANDA (AMANDA collaboration, Cowen et al.), Proc. of the 30th Intl. Conf. on High-Energy Physics (ICHEP 2000), Osaka, Japan, *ed.* C.S. Lim and T. Yamanaka, World Scientific **II** 965 (2001).

WIMP Searches with AMANDA-B10 (AMANDA collaboration, Edsjö et al.), Proc. of the 3rd Intl. Workshop on the Identification of Dark Matter (IDM 2000), York, England, *ed.* N.J.C. Spooner and V. Kudryavtsev, World Scientific 499 (2001); astro-ph/0012285.

Particle Astrophysics with the AMANDA Neutrino Telescope (AMANDA collaboration, Spiering et al.), Proc. of Quantum Theory Centenary: Symposium 4*: The Foundations of Quantum Physics before 1935*, Berlin, Germany (2000), Annalen der Physik **10** 131 (2001).

Results from the AMANDA High-Energy Neutrino Detector (AMANDA collaboration, Biron et al.), Proc. of the Intl. Workshop on Neutrinos and Physics beyond the Standard Model: *NANPino (Non-Accelerator New Physics, Neutrino Observations*), Dubna, Russia (2000), Part. Nucl. Lett. **104** 7 (2001).

High-Energy Neutrino Astronomy: First Light, Proc. of Europhysics Neutrino Oscillation Workshop (NOW2000), Otranto, Italy, *ed.* G. Fogli, Nucl. Phys. B **100** 320 (2001).

Color Evaporation-Induced Rapidity Gaps (with O.J.P. Eboli and E.M. Gregores), Proc. of DIFFRACTION 2000: Intl. Workshop on Diffraction in High-Energy and Nuclear Physics, Cetraro, Italy, *ed.* R. Fiore et al., Nucl. Phys. B **99** 257 (2001).

10^{20} eV Cosmic-Ray and Particle Physics with IceCube (with J. Alvarez-Muñiz), Proc. of the 1st Intl. Workshop on Radio Detection of High-Energy Particles (RADHEP 2000), Los Angeles, California, *ed.* D. Saltzberg (AIP Conf. Proc. **579** 305 (2001).

Kilometer-Scale High-Energy Neutrino Observatories, Proc. of the 9th Intl. Workshop on Neutrino Telescopes, Venice, Italy, *ed.* M. Baldo-Ceolin, Padua U. 483 (2001).

Results from AMANDA (AMANDA collaboration, Karle et al.), Proc. of the 9th Intl. Workshop on Neutrino Telescopes, Venice, Italy, *ed.* M. Baldo-Ceolin, Padua U. **2** 569 (2001).

Results from AMANDA (AMANDA collaboration, Hill et al.) Proc. of XXXVIth Rencontres de Moriond, *Electroweak Interactions and Unified Theories*, Les Arcs, France (2001); astro-ph/ 0106064.

Physics Results from the AMANDA Neutrino Detector (AMANDA collaboration, Kowalski et al.), Proc. of the Intl. Europhysics Conf. on High-Energy Physics (HEP 2001), Budapest, Hungary, J. of High-Energy Phys.; PrHEP-hep2001/207.

Initial Results from AMANDA (AMANDA collaboration, de Young et al.), Proc. of the 21st Rencontres de Moriond Workshop on Very–High-Energy Phenomena in the Universe, Les Arcs, France, NAP-T4 (2001).

Analysis of Atmospheric Muons with AMANDA (AMANDA collaboration, Desiati et al.), Proc. of the 2nd Workshop on Methodical Aspects of Underwater/Ice Neutrino Telescopes, Hamburg, Germany (2001), *ed.* R. Wischnewski, DESY 23 (2002).

Potential of AMANDA-II in HE Neutrino Astrophysics (AMANDA collaboration, Barwick et al.), Proc. of the 2nd Workshop on Methodical Aspects of Underwater/Ice Neutrino Telescopes (2001), DESY 57 (2002).

Performance Studies for the IceCube Detector, (AMANDA collaboration, Leuthold et al.), Proc. of the 2nd Workshop on Methodical Aspects of Underwater/Ice Neutrino Telescopes (2001), DESY 65 (2002).

Search for UHE Neutrinos with AMANDA (AMANDA collaboration, Hundertmark et al.), Proc. of the 2nd Workshop on Methodical Aspects of Underwater/Ice Neutrino Telescopes (2001), DESY 69 (2002).

Monte Carlo Event Generation in AMANDA (AMANDA collaboration, Hundertmark et al.), Proc. of the 2nd Workshop on Methodical Aspects of Underwater/Ice Neutrino Telescopes (2001), DESY 105 (2002).

Cascade Reconstruction in AMANDA (AMANDA collaboration, Kowalski et al.), Proc. of the 2nd Workshop on Methodical Aspects of Underwater/Ice Neutrino Telescopes (2001), DESY 135 (2002).

Pattern Recognition in AMANDA (AMANDA collaboration, Steffen et al.), Proc. of the 2nd Workshop on Methodical Aspects of Underwater/Ice Neutrino Telescopes (2001), DESY 131 (2002).

The Highest-Energy Cosmic Rays, Gamma Rays and Neutrinos: Facts, Fancy and Resolution, Proc. of the 20th Intl. Symposium on Lepton-Photon Interactions with High Energies, Rome, Italy (2001), Int. J. Mod. Phys. A **17** 3433 (2002).

Physics Results from the AMANDA-B10 Neutrino Telescope (AMANDA collaboration, Hallgren et al.), Proc. of Topics in Astroparticle and Underground Physics (TAUP 2001), Assergi, Italy, Nucl. Phys. B **110** 507 (2002).

The AMANDA-II Neutrino Telescope (AMANDA collaboration, Wischnewski et al.), Proc. of TAUP 2001, Assergi, Italy, Nucl. Phys. B **110** 510 (2002).

Scientific Goals of the IceCube Neutrino Detector at the South Pole (IceCube Collaboration, Goldschmidt et al.), Proc. of TAUP 2001, Assergi, Italy, Nucl. Phys. B **110** 516 (2002).

The Highest-Energy Cosmic Rays, Gamma Rays and Neutrinos: Facts, Fancy, and Resolution, Proc. of the First NCTS Workshop on Astroparticle Physics, Kenting, Taiwan (2001), *ed.* H. Athar et al., World Scientific 3 (2002).

Atmospheric Neutrinos, WIMPS and Monopoles: Physics with the AMANDA Neutrino Telescope (AMANDA collaboration, Rhode et al.), Proc. of the 4th Intl. Heidelberg Conf. on Dark Matter in Astro- and Particle Physics (DARK 2002), Capetown, South Africa, *ed.* H.V. Klapdor-Kleingrothaus and R.D. Viollier (Springer Verlag, 2002) 531.

Application of Bayes's Theorem to Muon Track Reconstruction in AMANDA (AMANDA collaboration, de Young et al.), Proc. of the Conf. on Advanced Statistical Techniques in Particle Physics, Durham, England, *ed.* M.R. Whalley and L. Lyons, IPPP 235 (2002).

Physics and Operation of the AMANDA-II High-Energy Neutrino Telescope (AMANDA collaboration, Barwick et al.), Proc. of the SPIE Intl. Symposium on Astronomical Telescopes and Instrumentation, Waikoloa, Hawaii, *ed.* P. Gorham, Particle Phys. Instrn. **4858** (2002); astro-ph/0211269.

Time Calibration of AMANDA: Three Variations of a Theme of T_o (AMANDA collaboration, Hanson et al.), Proc. of the 10th Intl. Conf. on Calorimetry in High Energy Physics (CALOR 2002), Pasadena, California, *ed.* R.Y. Zhu, World Scientific 452 (2002).

Calorimetry (GeV-TeV) in AMANDA and IceCube Telescopes (AMANDA/IceCube collaborations, Lamoreaux et al.)*,* Proc. of CALOR 2002, Pasadena, California, World Scientific (2002).

The AMANDA Search for High-Energy Neutrinos from Gamma-Ray Bursts (AMANDA collaboration, Hardtke et al.), Proc. of Gamma-Ray Burst and Afterglow Astronomy: *A Workshop Celebrating the First Year of the HETE Mission,* Woods Hole, Massachusetts (2001), AIP Conf. Proc. **662** 150 (2003).

The Highest-Energy Cosmic Rays, Gamma Rays, and Neutrinos: Facts, Fancy, and Resolution, Proc. of Collisions: *Intl. Conf. on Collisions in the Universe*, Namur, Belgium (2001), Revue des Questions Scientifiques **174** 1 18 (2003).

Results from the AMANDA Telescope (AMANDA collaboration, Bouhali et al.), Proc. of XVI Intl. Conf. on Particles & Nuclei (PaNic02), Osaka, Japan, Nucl. Phys. A **721** 545c (2003).

Recent Results from AMANDA II (AMANDA collaboration, Hanson et al.), Proc. of the 31st Intl. Conf. on High Energy Physics (ICHEP02), Amsterdam, Netherlands, *ed.* S. Bentvelsen et al., North-Holland 126 (2003).

Results from the Antarctic Muon and Neutrino Detector Array (AMANDA collaboration, Cowen et al.), Proc. of the XXth Intl. Conf. on Neutrino Physics and Astrophysics, Munich, Germany (Neutrino 2002), *ed.* F. von Feilitzsch and N. Schmitz, Nucl. Phys. B **118** 371 (2003).

IceCube – The Next Generation Neutrino Telescope at the South Pole (IceCube Collaboration, Karle et al.), Proc. of Neutrino 2002, Nucl. Phys. B **118** 388 (2003); astro-ph/0209556.

Search for Neutrino-Induced Cascades with the AMANDA II Detector (AMANDA collaboration, Kowalski et al.), Proc. of Neutrino 2002, Nucl. Phys. B **118** 513 (2003).

The Digital Optical Module – How IceCube Will Acquire Data (IceCube and AMANDA collaborations, Stokstad et al.), Proc. of Neutrino 2002, Nucl. Phys. B **118** 514 (2003).

High-Energy Neutrinos from Cosmic Rays, Proc. of the ESO-CERN-ESA Symposium on Astronomy, Cosmology and Fundamental Physics, Garching, Germany (2002), *ed.* L. DiLella et al., Springer-Verlag 227 (2003).

High-Energy Neutrino Astronomy: Science and First Results, The Early Universe & the Cosmic Microwave Background: Theory and Observations, 9th Course on Astro-fundamental Physics, Intl. School of Astrophysics "D. Chalonge," Palermo, Sicily (2002), *ed.* N.G. Sanchez and Y.N. Parijisky, Kluwer Academic Press 401 (2003).

Neutrinos from the Annihilation or Decay of Superheavy Relic Dark-Matter Particles (with D. Hooper), Proc. of 5th Intl. UCLA Symposium on Sources and Detection of Dark Matter & Dark Energy in the Universe (DM 2002), Marina del Ray, CA, Nucl. Phys. **124** 243 (2003).

Multi-Messenger Astronomy: Cosmic Rays, Gamma Rays, and Neutrinos, Proc. of Texas in Tuscany, *XXI Symposium on Relativistic Astrophysics*, Florence, Italy (2002), *ed.* R. Bandiera et *al.*, World Scientific 117 (2003); astro-ph/0302489.

Neutrino Astronomy at the South Pole: Status of the AMANDA Experiment (AMANDA collaboration, Desiati et al.), Proc. of the 17th Les Rencontres de Physique de la Valle d'Aosta: *Results and Perspectives in Particle Physics,* La Thuile, Italy, *ed.* M. Greco, Frascati, INFN 45 (2003); astro-ph/0306536.

Search for Neutrino Point Sources with the AMANDA Telescope (AMANDA collaboration, Bouhali et al.), Proc. of the Intl. Workshop on Astroparticle and High-Energy Physics (AHEP-2003), Valencia, Spain, *ed.* M. Hirsch et al., J. of HE Phys. **10** (2003).

High-Energy Neutrino Astronomy: Next-Generation Telescopes, Proc. of the 10th Intl. Workshop on Neutrino Telescopes, Venice, Italy, *ed.* M. Baldo-Ceolin, **II** 354 (2003).

Results from the AMANDA Neutrino Telescope (AMANDA collaboration, Hundertmark et al.), Proc. of the 10th Intl. Workshop on Neutrino Telescopes, Venice, Italy, **II** 479 (2003).

Recent Results from the AMANDA Experiment (AMANDA collaboration, Niessen et al.), Proc. of 38th Rencontres de Moriond *on Electroweak Interactions and Unified Theories*, Les Arcs, Savoie, France (2003); astro-ph/0306209.

Exotic Particle Detection with the AMANDA Detector (AMANDA collaboration, Kowalski et al.), Proc. of the 23rd Intl. Conf. on Physics in Collision (PIC 2003), Zuethen, Germany, SLAC eConf C030626:FRAP10 369 (2003).

IceCube: A Multipurpose Neutrino Telescope (IceCube Collaboration, Rawlins et al.), Proc. of 3rd Intl. Workshop for Comprehensive Study of the High-Energy Universe—*Toward Very–High-Energy Particle Astronomy* (VHEPA-3), Tokyo, J. Phys. Soc. of Japan Suppl. **77B** 71 (2008).

High-Energy Neutrino Astronomy: From AMANDA to IceCube, Proc. of IAU XXV General Assembly, Sydney, Australia, *ed.* P. Blasi and M. Salvati, ASP Conf. Series **13 (**2003); astro-ph/0311004.

Particle Astronomy from Antarctica (AMANDA & IceCube collaborations, Hulth et al.), IAU XXV General Assembly, Sydney, Australia, ASP Conf. Series **13** (2003).

IceCube: A Kilometer-Scale Neutrino Observatory, Proc. of IAU XXV General Assembly, Sydney, Australia, *Astronomy in Antarctica and Future Visions for Antarctic Astronomy, ed.* O. Engvold and M.G. Burton, ASP Conf. Series **13** (2003).

The Search for the Sources of Cosmic Rays, Intl. Scientific Mtg. of the Belgian Physical Society, Ghent University, *ed.* J. Darville, Physicalia Magazine **25** 4 243 (2003).

Results from the AMANDA Neutrino Telescope (for the AMANDA collaboration), Proc. of the 4th Tegernsee Intl. Conf. on Particle Physics Beyond the Standard Model: *Beyond the Desert,* Tegernsee, Germany, *ed.* H. Klapdor-Kleingrothaus, Springer Proc. Phys. (2003).

Results from the AMANDA Neutrino Telescope (AMANDA collaboration, Bernardini et al.), Proc. of the Very Large Volume Neutrino Telescope (VLVνT) Workshop, *Technical Aspects of a Very Large Volume Neutrino Telescope in the Mediterranean Sea,* Amsterdam, Netherlands, *ed.* E. De Wolf, NIKHEF 17 (2003).

Muon Track Reconstruction and Data Selection Techniques in AMANDA (AMANDA collaboration, Wiebusch et al.), Proc. of the VLVνT Workshop, Amsterdam, Netherlands, NIKHEF 129 (2003).

The IceCube Project (IceCube Collaboration, Spiering et al.), Proc. of the VLVνT Workshop, Amsterdam, Netherlands, NIKHEF 21 (2003); astro-ph/0404090.

Astronomy in the Ice: Bringing Neutrino Astronomy to the Secondary Schools (with J. Madsen et al.), presented at the NASA Office of Space Science Education and Public Outreach Conf., Chicago, Illinois (2002), Conf. Proc. of Astron. Soc. of the Pacific **CS-319** 111 (2004).

Latest Results of AMANDA (AMANDA collaboration, Rhode et al.), Proc. of the Intl. Europhysics Conf. on High-Energy Physics (HEP 2003), Aachen, Germany, Euro. Phys. Journal C **33** (Suppl) 1 s953 (2004).

The IceCube Neutrino Telescope (IceCube Collaboration, Yoshida et al.), Proc. of Intl. Symposium on Cosmology and Particle Astrophysics (CosPA 2003), Taipei, Taiwan, *ed.* W-Y. Paunchy Hwang et al, Mod. Phys. Lett. A **19** 1099 (2004).

High-Energy Neutrino Astronomy: From AMANDA to IceCube, Proc. of the Intl. Conf. on Cosmic Rays and Dark Matter, Nagoya University, Japan (2003), *ed.* Y. Muraki, Universal Academy Press **42** (2004).

Method for Detecting Neutrinos from Internal Shocks in GRB Fireballs with AMANDA (AMANDA collaboration, Stamatikos et al.), Proc. of 2003 GRB Conference, *30th Anniversary of GRB Discovery,* Santa Fe, New Mexico, AIP Conf. Proc. **727** 146 (2004).

The AMANDA Search for High-Energy Neutrinos from Gamma-Ray Bursts (AMANDA collaboration, Hardtke et al.), Proc. of 2003 GRB Conf., AIP Conf. Proc. **727** 158 (2004).

High-Energy Neutrino Astronomy, Proc. of Thinking, Observing and Mining the Universe, Sorrento, Italy (2003), *ed.* G. Longo and G. Miele, World Scientific 169 (2004).

AMANDA: Status and Latest Results (AMANDA collaboration, Ribordy et al.), Proc. of 39th Rencontres de Moriond *on Electroweak Interactions and Unified Theories*, La Thuile, Italy (2004); hep-ex/0405035.

High-Energy Neutrino Astronomy, The New Cosmology: Joint Procs. of the Mitchell Symposium on Observational Cosmology and the Strings and Cosmology Conf., College Station, Texas, *ed.* R.E. Allen et *al.*, AIP Conf. Proc. **743** 241 (2004).

Results from the AMANDA Neutrino Telescope (AMANDA collaboration, de los Heros et al.), Proc. of 5th Cosmic-Ray Intl. Seminar: *GZK and Surroundings* (CRIS 2004), Catania, Italy, *ed.* C. Aramo et al., Nucl. Phys. B **136** 85 (2004).

High-Energy Neutrino Astronomy, Proc. of CRIS 2004, Catania, Italy, *ed.* C. Aramo et *al*, Nuclear Physics B **136** 93 (2004).

Design and Status of IceCube (IceCube Collaboration, Kestel et al.), Proc. of 10th Conf. on Instrumentation, Vienna, Austria, Nucl. Inst. and Methods A **535** 139 (2004); astro-ph/ 0405008.

Results from the AMANDA Detector (AMANDA collaboration, Olbrechts et al.), Proc. of Cracow Epiphany Conference on Astroparticle Physics, Cracow, Poland, Acta Phys. Polon. B **35** 1919 (2004).

Status of the IceCube Neutrino Observatory (IceCube Collaboration, Sullivan et al.), Proc. of 2nd VERITAS Symposium on TeV Astrophysics of Extragalactic Sources, Chicago, Illinois 2003, New Astron. Rev. **48** 519 (2004).

Lectures on High-Energy Neutrino Astronomy, *Intl. W.E. Heraeus Summer School on Physics with Cosmic Accelerators*, Bad Honnef, Germany, 2004; astro-ph/0506248

Results from the AMANDA Neutrino Telescope (AMANDA collaboration, Steffen et al.), Proc. of 8th Intl. Workshop on Topics in Astroparticle and Underground Physics (TAUP 2003), Seattle, Washington, Nucl. Phys. B **138** 167 (2005).

The IceCube Neutrino Telescope (IceCube Collaboration, Yoshida et al.), Proc. of TAUP 2003, Nucl. Phys. B **138** 179 (2005).

The Search for Muon Neutrinos from Gamma-Ray Bursts with AMANDA B-10 and B-II (AMANDA collaboration, Kuehn et al.), TAUP 2003, Nucl. Phys. B **138** 171 (2005).

IceCube Education & Outreach: Bringing Neutrinos to the Secondary School Classroom (IceCube Collaboration, Madsen et al.), TAUP 2003, Nucl. Phys. B **138** 458 (2005).

IceCube: The Cubic-Kilometer Neutrino Telescope at the South Pole (IceCube Collaboration, Fazely et al.), Proc. of Coral Gables Conf.: *Launching of La Belle Epoque in High-Energy Physics and Cosmology*, Fort Lauderdale, Florida (2003), *ed.* T. Curtright et al., World Scientific (2005); astro-ph/0406125.

New Results from the Antarctic Muon and Neutrino Detector Array (AMANDA collaboration, Woschnagg et al.), Proc. of 21st Intl. Conf. on Neutrino Physics and Astrophysics (Neutrino 2004), Paris, France, *ed.* J. Dumarchez et al., Nucl. Phys. B **143** 343 (2005); astro-ph/0409423.

The IceCube Neutrino Observatory (IceCube Collaboration, Botner et al.), Neutrino 2004, Paris, France, *ed.* J. Dumarchez et al., Nucl. Phys. B **143** 367 (2005).

High-Energy Neutrino Astronomy, Proc. of the NATO Advanced Study Institute Symposium *The Electromagnetic Spectrum of Neutron Stars,* Marmaris, Turkey (2004), *ed.* A. Baykal, Kluwer Academic Publishers **210** (2005).

High-Energy Neutrino Astronomy, Proc. of the XXIV Intl. Symposium on Multiparticle Dynamics (ISMD 2004), Rohnert Park, California (2004), *ed.* B. Gary, Acta Phys. Polon. B **36** (2005).

Neutrino Astronomy and Cosmic Rays at the South Pole — Latest Results from AMANDA and Perspectives for IceCube (AMANDA and IceCube collaborations, Desiati et al.), Proc. of XIX European Cosmic-Ray Symposium, Firenze, Italy (2004); Intl. J. of Mod. Phys. A **20** 6919 (2005).

The AMANDA Neutrino Telescope (AMANDA collaboration, Silvestri et al.), Meeting of the Division of Particles and Fields of the American Physical Society for the Year 2004 (DPF2004), Riverside, California, Intl. J. Mod. Phys. A **20** 3096 (2005).

Status of the IceCube Neutrino Telescope (IceCube Collaboration, de Young et al.), Proc. of DPF2004, Riverside, California, Intl. J. of Mod. Phys. A **20** 3160 (2005).

Results of the AMANDA Detector (AMANDA collaboration, Olbrechts et al.), Proc. of the 32nd Intl. Conf. on High-Energy Physics (ICHEP'04), Beijing, China, *ed.* H. Chen et al., World Scientific 440 (2005).

High-Energy Neutrino Astronomy, Proc. of the Intl. Nuclear Physics Conf. (INPC 2004), Göteborg, Sweden, *ed.* B. Jonson et al., Nucl. Phys. A **752** 3 (2005).

High-Energy Neutrino Astronomy, Proc. of the 2nd Intl. Symposium on High-Energy Gamma-Ray Astronomy, Heidelberg, Germany (2004), *ed.* F.A. Aharonian et al, AIP Conf. Proc. **745** 3 (2005).

New Results from the AMANDA Neutrino Telescope (AMANDA collaboration, Bernardini et al.), Proc. of Neutrino Oscillation Workshop (NOW2004), Conca Specchiula, Italy, *ed.* P. Bernardini et al., Nucl Phys B **145** 319 (2005).

High-Energy Neutrino Astronomy, Proc. of NOW2004, Nucl. Phys. B **145** 301 (2005).

IceTop Status in 2004 (IceCube Collaboration, Stanev et al.), Proc. of NOW2004, Nucl. Phys. B **145** 327 (2005); astro-ph/0501046.

Recent Results from the AMANDA-II Neutrino Telescope (AMANDA collaboration, Gross et al.), 40th Rencontres de Moriond *on Electroweak Interactions and Unified Theories*, La Thuile, Italy (2005); astro-ph/0505278.

IceCube: 1 Million Atmospheric Neutrinos (with M.C. González-García et al.), Proc. of the XI Intl. Workshop on Neutrino Telescopes, Venice, Italy, *ed.* M. Baldo-Ceolin, Padua U. 355 (2005).

Multi-Messenger Studies with AMANDA/IceCube: Observations and Strategies (IceCube Collaboration, Bernardini et al.), Proc. of the 7th Workshop on *Towards a Network of Atmospheric Cherenkov Detectors* (Cherenkov 2005), Palaiseau, France; astro-ph/0509396.

Exploring the High-Energy Neutrino Universe from the South Pole—Results from AMANDA and Status of IceCube (AMANDA/IceCube collaborations, Woschnagg et al.), Proc. of the 19th Rencontres de Physique de la Vallée d'Aosta, La Thuile, Italy (2005), *ed.* M. Greco, Frascati, INFN 89-106.

Getting There: From AMANDA to IceCube (AMANDA collaboration, de los Heros et al.), Proc. of the Intl. Europhysics Conf. on High Energy Physics (HEP2005), Lisbon, Portugal PoS HEP2005: 023 (2006).

Design and Performance of the IceCube Electronics (IceCube Collaboration, Stockstadt et al.), Proc. of the 11th LCH Electronics Workshop, Heidelberg, Germany, CERN Proc. 4 (2005).

Astroparticle Physics with Neutrinos (IceCube Collaboration, Köpke et al.), Proc. of the XXVth Conf. on Physics in Collision, Prague, Czech Republic, *ed.* V. Simák et al., AIP Conf. Series **815** 95 (2005).

Neutrino Physics at the South Pole—Recent Results from the AMANDA Experiment (IceCube Collaboration, Becker et al.), Proc. of the 9th ICATPP Conf. on Astroparticle, Particle, and Space Physics, Detectors and Medical Physics Applications, Como, Italy 132 (2005).

Design, Production and First Results from the IceCube Digital Optical Module (IceCube Collaboration, Tarasova et al.), 9th ICATPP Conf., Como, Italy 297 (2005).

High-Energy Neutrino Astronomy, Proc. of the 44th INFN Workshop: *QCD at Cosmic Energies—The Highest-Energy Cosmic Rays and QCD,* Erice, Italy (2004), World Scientific (2006).

Exploring the Neutrino Universe with AMANDA and IceCube (IceCube Collaboration, Hardtke et al.), Proc. of the 20th Lake Louise Winter Institute: *Fundamental Interactions*, Lake Louise, Alberta (2005), *ed.* A. Astbury et *al.*, World Scientific 169 (2006).

From AMANDA to IceCube (IceCube Collaboration, Ribordy et al.), Proc. of the Vth Intl. Conf. on Non-Accelerator New Physics, Dubna, Russia (2005), Phys. Atom. Nucl. **69** 1899 (2006); astro-ph/0509322.

AMANDA and IceCube: Neutrino Astronomy at the South Pole (IceCube Collaboration, Taboada et al.), Proc. of the 9th Intl. Conf. on Topics in Astroparticle & Underground Physics (TAUP 05), Zaragoza, Spain, J. Phys. Conf. Series **39** 438 (2006).

Lectures on Neutrino Astronomy, Proc. of Advanced Summer School in Physics 2005: *Frontiers in Contemporary Physics* (EAV'05), Cinvestav, Mexico, *ed.* O. Rosas-Ortiz, M. Carbajal and O. Miranda, AIP Conf. Proc. **809** 130 (2006).

First Results from IceCube (IceCube Collaboration, Klein et al.), Proc. of Particles and Nuclei Intl. Conf. (PANIC 2005), Santa Fe, NM, AIP Conf. Proc. **842** 971 (2006); astro-ph/0601269.

Neutrino Astronomy at the South Pole: Latest Results from AMANDA-II (IceCube Collaboration, Desiati et al.), PANIC 2005, Santa Fe, New Mexico and satellite meeting, Upton, New York, AIP Conf. Proc. **842** 983 (2006); astro-ph/0601571.

Systematic Uncertainties in the Analysis of Data from a Neutrino Telescope: The AMANDA Case (IceCube Collaboration, Bernardini et al.), Proc. of the 2nd Intl. Workshop on Very–Large-

Volume Neutrino Telescopes (VLVnT2), Catania, Italy, Nucl. Instrum. and Meth. A **567** 474 (2006).

Status of IceCube in 2005 (IceCube Collaboration, Karle et al.), Proc. of VLVnT2, NIMA **567** 438 (2006); astro-ph/0608139.

A New Search Paradigm for Correlated Neutrino Emission from Discrete GRBs using Antarctic Cherenkov Telescopes in the Swift Era (IceCube Collaboration, Stamatikos et al.), 16th Annual Astrophysics Conf. in Maryland: *Gamma-Ray Bursts in the Swift Era, ed.* S.S. Holt et al., AIP Conf. Proc. **836** 599 (2006); astro-ph/0602481.

The Search for Neutrinos from Gamma-Ray Bursts with AMANDA (IceCube and IPN collaborations, Kuehn et al.), Proc. of the 16th Annual Astrophysics Conf. in Maryland, *ed.* S.S. Holt et al., AIP Conf. Proc. **836** 616 (2006).

From AMANDA to IceCube (IceCube Collaboration, Hulth et al.), Proc. of 3rd Intl. Workshop on Neutrino Oscillations in Venice (NO-VE): *50 years after the Neutrino Experimental Discovery* (2006); astro-ph/0604374.

Cosmic Neutrinos and the Energy Budget of Galactic and Extragalactic Cosmic Rays, Proc. of the Intl. Workshop on Energy Budget in the High-Energy Universe, Kashiwa, Japan (2006), *ed.* K. Sato and J. Hisano, (World Scientific, Singapore, 2007) 71; astro-ph/0604441.

Neutrino Detectors in Ice: Results and Perspectives (IceCube Collaboration, Bouchta et al.), Proc. of the 20th Rencontres de Physique de la Vallee d'Aosta, La Thuile, Italy (2006); astro-ph/0606235.

Neutrino Astronomy at the South Pole (IceCube Collaboration, Toale et al.), Proc. of the XLIst Rencontres de Moriond *on Electroweak Interactions and Unified Theories*, La Thuile, Italy, 2006; astro-ph/0607003.

Very–High-Energy Phenomena in the Universe: Results from the AMANDA Neutrino Telescope and Status of the IceCube Detector (AMANDA collaboration, Hundertmark et al.), Proc. of the XLIst Rencontres de Moriond, La Thuile, Italy, 2006.

Recent Results from the AMANDA II Neutrino Telescope (AMANDA collaboration, Gross et al.), Proc. of XLIst Rencontres de Moriond, La Thuile, Italy, 2006.

IceCube – Neutrino Astronomy at South Pole (IceCube Collaboration, Hundertmark et al.), Proc. of 2nd Scandinavian NeutrinO Workshop (SNOW 2006), Stockholm, Sweden, *ed.* T. Ohlsson et al., Physica Scripta **T127** 103 (2006).

IceCube: The State of the Art (IceCube Collaboration, Montaruli et al.), Proc. of the Vulcano Workshop 2006: *Frontier Objects in Astrophysics and Particle Physics*, *ed.* F. Giovannelli and G. Mannocchi, Italian Phys. Soc., Editrice Compositori, Bologna, Italy 93; astro-ph/ 0608140.

From AMANDA to IceCube: Neutrino Astronomy at the South Pole (IceCube Collaboration, Filimonov et al.), Proc. of the 9th Conf. on the Interactions of Particle and Nuclear Physics (CIPANP 2006), Rio Mar Beach, Puerto Rico, *ed.* T.M. Liss, AIP Conf. Series **870** (2007).

Results from the AMANDA Neutrino Telescope (IceCube Collaboration, Zornoza et al.), Cosmic-Ray Intl. Seminars (CRIS06), Catania, Italy, Nucl. Phys. B **165** 196 (2007).

Review on Neutrino Telescopes (IceCube Collaboration, Montaruli et al.), Proc. of CRIS06, Nucl. Phys. B **165** 161 (2007).

The EHE Neutrino Search Capability of the IceCube Observatory (IceCube Collaboration, Ishihara et al.), Proc. of CRIS06, Catania, Italy, Nucl. Phys. B **165** 200 (2007); astro-ph/ 0611794.

The IceCube Neutrino Telescope (IceCube Collaboration, Krasberg et al.), Proc. of the XII Intl. Conf. on Calorimetry in High Energy Physics (CALOR2006), Chicago, Illinois, *ed.* S.R. Magill and R. Yoshida, AIP Conf. Proc. **867** 209 (2006).

First Results from AMANDA Using the TWR System (IceCube Collaboration, Silvestri et al.), Proc. of Intl. School of Cosmic-Ray Astrophysics (ISCRA), *15th Course*: *Astrophysics at Ultra-High Energies,* Erice, Italy (2006), Mod. Phys. Let. A **22** 1769 (2007); astro-ph/ 0701319.

High-Energy Neutrino Astronomy: Towards Kilometer-Scale Neutrino Observatories, Proc. of 11th Marcel Grossmann Meeting on Recent Developments in Theoretical and Experimental General Relativity, Gravitation, and Relativistic Field Theories, Berlin, Germany, 2006, *ed.* H. Kleinart, R.T. Jantzen, and R. Ruffini **A** 272 (2008).

Upper Limits on Neutrino Fluxes from Point-Like Sources with AMANDA-II (IceCube Collaboration, Ackermann et al.), Proc. of Multi-Messenger Approach to High-Energy Gamma-Ray Sources, *3rd Workshop on the Nature of Unidentified High-Energy Sources*, Barcelona, Spain, 2006, Astrophys. and Space Science **309** 421 (2007).

Cosmic Neutrinos from Sources of Galactic and Extragalactic Cosmic Rays (IceCube Collaboration, Halzen et al.), Proc. of Multi-Messenger Approach to High-Energy Gamma-Ray Sources, Barcelona, Spain, 2006, Astrophys. and Space Sci., **309** 407 (2007); astro-ph/ 0611915.

Neutrino Astronomy with IceCube and AMANDA (IceCube Collaboration, Hill et al.), Proc. of the 22nd Intl. Conf. on Neutrino Physics and Astrophysics (Neutrino 2006), Santa Fe, New Mexico; astro-ph/0611773.

The IceCube Neutrino Observatory: Latest Results on the Search for Point Sources and Status of IceCube Construction (IceCube Collaboration, Castermans et al.), Proc. of On the Present and Future of Pulsar Astronomy – IAU XXVIth General Assembly, Prague, Czech Republic (2006), *ed.* K. van der Hucht (Cambridge University Publishing, 2007).

Neutrino Astronomy and Astrophysics with IceCube and AMANDA (IceCube Collaboration, Olivas et al.), Proc. of 33rd Intl. Conf. on High Energy Physics (ICHEP 06), Moscow, Russia (World Scientific, Singapore, 2007) **I** 251.

The Search for UHE Neutrinos with AMANDA-II (IceCube Collaboration, Gerhardt et al.), Proc. of SUSY 06, Irvine, California, *ed.* J. Feng, AIP Conf. Series **903** 662 (2007).

The IceCube Neutrino Telescope and Its Capability to Search for the EHE Neutrinos (IceCube Collaboration, Yoshida et al.), SUSY 06, AIP Conf. Series **903** 626 (2007).

Search for Dark Matter with the AMANDA Detector (IceCube Collaboration, De Clercq et al.), Proc. of SUSY 06, AIP Conf. Series **903** 603 (2007).

Neutralino Dark Matter Searches with Neutrino Telescopes: AMANDA Results and IceCube Prospects (IceCube Collaboration, Hubert et al.), Proc. of the 7th UCLA Symposium on Sources and Detection of Dark Matter and Dark Energy in the Universe, Marina del Rey, California, Nucl. Phys. B **173** 87 (2007).

Implications of AMANDA Neutrino Flux Limits (IceCube Collaboration, Becker et al.), Proc. of the TeV II Workshop, Madison, Wisconsin (2006), *ed.* F. Halzen et al., Jour. Phys. Conf. Series **60** 219 (2007); astro-ph/0611597.

Tau Neutrinos in IceCube (IceCube Collaboration, Cowen et al.), Proc. of the TeV II Workshop (2006), JPCS **60** 227 (2007); astro-ph/0611597.

IceCube – First Results (IceCube Collaboration, Dumm et al.), Proc. of the TeV II Workshop (2006), JPCS **60** 334 (2007); astro-ph/0611597.

Air Showers in a Three-Dimensional Array: Recent Data from IceCube/IceTop (IceCube Collaboration, Bai et al.), Proc. of the TeV II Workshop (2006), JPCS **60** 327 (2007); astro-ph/0611597.

Construction status and future of the IceCube neutrino observatory (IceCube Collaboration, K. Hanson et al.), Proc. of the TeV II Workshop (2006), JPCS **60** 47 (2007); astro-ph/0611597.

Multi-Year Search for a Diffuse Flux of Muon Neutrinos with AMANDA-II (IceCube Collaboration, Hodges et al.), Proc. of the TeV II Workshop (2006), JPCS **60** 337 (2007); astro-ph/0611597.

Searches for Neutrinos from Gamma-Ray Bursts with AMANDA-II and IceCube (IceCube Collaboration, Hughey et al.), Proc. of the TeV II Workshop (2006), JPCS **60** 340 (2007); astro-ph/0611597.

IceCube: Multiwavelength Search for Neutrinos from Transient Point Sources (IceCube Collaboration, Resconi et al.), Proc. of the TeV II Workshop (2006), JPCS **60** 223 (2007); astro-ph/0611597.

High-Energy Gammas from the Giant Flare of SGR 1806-20 of December 2004 in AMANDA (IceCube Collaboration, Zornoza et al.), Proc. of the TeV II Workshop (2006), JPCS **60** 340; astro-ph/0611597.

IceCube: Toward a km^3 Neutrino Telescope (IceCube Collaboration, Desiati et al.), XXth European Cosmic Ray Symposium, Lisbon, Portugal, (2006); astro-ph/0611603.

Status of IceCube and Future Plans (IceCube Collaboration, Williams et al.), Proc. of the Workshop on Next-Generation Nucleon Decay and Neutrino Detectors (NNN06), Seattle, Washington, 2006, *ed.* R. J. Wilkes, AIP Conf. Proc. **944** 51 (2007).

The IceCube Neutrino Observatory – Design and Performance (IceCube Collaboration, Walter et al.), 10th Topical Seminar on Innovative Particle and Radiation Detectors, Siena, Italy (2006), *ed.* P.S. Marrocchesi et al., Nucl. Phys. B **172** 13 (2007).

Results Achieved with AMANDA (IceCube Collaboration, Xu et al.), Proc. of the XIV Intl. Symposium on Very–High-Energy Cosmic-Ray Interactions (ISVHECRI 2006), Weihai, China, *ed.* K.S. Cheng et al., Nucl. Phys. B **175** 401 (2008).

IceCube: Performance, Status, and Future (IceCube Collaboration, Rott et al.), Proc. of ISVHECRI 2006, Weihai, China, *ed.* K.S. Cheng et al., Nucl. Phys. B **175** 409 (2008); astro-ph/0611726.

The IceCube/IceTop Air Shower Experiment (IceCube Collaboration, Bai et al.), Proc. of ISVHECRI 2006, Weihai, China, Nucl. Phys. B **175** 415 (2008).

IceCube, the World's Largest Dark Matter Detector (IceCube Collaboration, Landsman et al.), Proc. of the 6th Intl. Workshop on the Identification of Dark Matter (IDM 2006), Island of Rhodes, Greece, 2006, *ed.* M. Axenides, G. Fanourakis, & J. Vergados, World Scientific, Singapore **A4** 450 (2007); astro-ph/0612239.

Testing Lorentz Invariance Using Atmospheric Neutrinos and AMANDA-II (IceCube Collaboration, Kelley et al.), 1st Workshop on Exotic Physics with Neutrino Telescopes, Uppsala, Sweden, 2006, Uppsala U. 131 (2007); astro-ph/0701333.

Exotic Physics with IceCube (IceCube Collaboration, Hardtke et al.), Proc. of the 1st Workshop on Exotic Physics with Neutrino Telescopes, Uppsala, Sweden, 2006, *ed.* C.P. de los Heros, Uppsala U. 89 (2007); astro-ph/0701333.

Neutralino Searches with AMANDA and IceCube – Past, Present and Future (IceCube Collaboration, Hubert et al.), Proc. of the 1st Workshop on Exotic Physics with Neutrino Telescopes, Uppsala, Sweden, 2006, *ed.* C.P. de los Heros, Uppsala U. 39 (2007); astro-ph/0701333.

AMANDA and IceCube: News and Neutrino Analyses (IceCube Collaboration, Rawlins et al.), Proc. of Colliders to Cosmic Rays 2007 (C2CR07), Granlibakken, Lake Tahoe, AIP Conf. Proc. **928** 69 (2007).

IceCube: Neutrino Telescope at the South Pole (IceCube Collaboration, Seo et al.), Proc. of the 21st Les Rencontres de Physique de la Vallee D'Aosta, Results and Perspectives in Particle Physics, La Thuile, Aosta, Italy, Frascati Physics Series **XLIV** 75 (2007).

Neutrinos from Cosmic Ray Accelerators in the Cygnus Region of the Galaxy (with A. O'Murchadha), Proc. of the XII Intl. Workshop of Neutrino Telescopes, Venice, Italy, *ed.* M. Baldo Ceolin, U. of Padua (2007); astro-ph/0705.1723.

Neutrino Physics with IceCube (IceCube Collaboration, Blaufuss et al.), Proc. of the XII Intl. Workshop of Neutrino Telescopes, U. of Padua 77 (2007).

The Highest-Energy Neutrinos, Proc. of the 10th Intl. Workshop on Topics in Astroparticle and Underground Physics (TAUP07), Sendai, Japan, *ed.* K. Inoue, A. Suzuki, and T. Mitsui, Jour. Phys. Conf. Series **120** 062004 (2008).

Indirect Searches for Dark Matter with IceCube (IceCube Collaboration, Rott et al.), Proc. of TAUP07, JPCS **120** 022009 (2008); astro-ph/ 07123524.

First Results of the IceCube Observatory on High Energy Neutrino Astronomy (IceCube Collaboration, Montaruli et al.), Proc. of TAUP07, JPCS **120** 062009 (2008); astro-ph/07123524.

Measurement of the Atmospheric Neutrino Flux with AMANDA-II and IceCube (IceCube Collaboration, Desiati et al.), Proc. of TAUP07, JPCS **120** 052038 (2008); astro-ph/ 07123524.

Identification of Extremely High-Energy, Contained Neutrino Events with the IceCube Observatory (IceCube Collaboration, Ono et al.), Proc. of TAUP07, JPCS **120** 0622029 (2008); astro-ph/07123524.

Diffuse High-Energy Neutrino Searches in AMANDA-II and IceCube: Results and Future Prospects (IceCube Collaboration, Hoshina et al.), Proc. of TAUP07, JPCS **120** 062007 (2008); astro-ph/07123524.

IceTop – Cosmic Ray Physics with IceCube (IceCube Collaboration, Waldenheimer et al.), Proc. of the 1st Roma Intl. Conf. on Astroparticle Physics (RICAP'07), Nucl. Instrum. and Meth. A **588** 130 (2008); astro-ph/0802.2540.

IceCube: Recent Results and Prospects (IceCube Collaboration, DeYoung et al.), Proc. of RICAP'07, NIMA **588** 92 (2008).

General Performance of the IceCube Detector and the Calibration Results (IceCube Collaboration, Inaba et al.), Proc. of the Intl. Workshop on New Photon Detectors (PD07), Kobe, Japan, PoS 031 (2007).

Search for Neutrinos from Gamma-Ray Bursts with AMANDA and IceCube (IceCube Collaboration, Kappes et al.), Proc. of the 6th Intl. Workshop on New Worlds in Astroparticle Physics, Faro, Portugal (2007).

Search for Neutralino Dark Matter with the AMANDA Neutrino Telescope and Prospects for IceCube (IceCube Collaboration, Rizzo et al.), Proc. of the 6th Intl. Heidelberg Conference on Dark Matter in Astro and Particle Physics, Sydney, Australia, 2007.

Particle Astrophysics from the Cold: Results and Perspectives of IceCube (IceCube Collaboration, de los Heros et al.), Proc. of the 1st AFI Symposium *From Vacuum to the Universe*, University of Innsbruck, Austria, 2007; astro-ph/0802.0147.

Search for Neutrinos from GRBs with AMANDA and IceCube (IceCube Collaboration, Becker et al.), Proc. of Gamma-Ray Bursts 2007, Santa Fe, NM, AIP Conf. Procs. **1000** 241 (2008).

Search for Transient Emission of Neutrinos in IceCube (IceCube Collaboration, Bernardini et al.), Proc. of the 80th Annual Scientific Mtg. of the Astronomische Gesellschaft *jointly with the 5th Bienneal Workshop on Astroparticle Physics: Cosmic Matter*, Wurzburg, Germany (Astronomische Nachrichten, 2007) **328** 7 A138.

The MAGIC/IceCube Target of Opportunity Program test run (IceCube Collaboration, Ackermann et al.), Proc. of the 80th Annual Scientific Mtg. of the Astronomische Gesellschaft, (Astronomische Nachrichten, 2007) **328** 7 A128.

Searches for Point-Like Sources of Cosmic Neutrinos with IceCube (IceCube Collaboration, Lauer et al.), Proc. of the 80th Annual Scientific Mtg. of the Astronomische Gesellschaft, (Astronomische Nachrichten, 2007) **328** 7 A127.

Extension of IceCube at Lower Energy: the Use of AMANDA as Nested Array and Future Perspectives (IceCube Collaboration, J. Becker et al.), Proc. of the 80th Annual Scientific Mtg. of the Astronomische Gesellschaft, (Astronomische Nachrichten, 2007) **328** 7 A133.

Astroparticle Physics with the AMANDA Neutrino Telescope (IceCube Collaboration, Baret et al.), Proc. of the 2007 Europhysics Conf. on High Energy Physics, Manchester, UK, J. of Phys. Conf. Series **110** 062001 (2008).

Neutrino Physics with IceCube (IceCube Collaboration, Cowen et al.), Proc. of the Euro. Phys. Soc. Conf. on High Energy Physics (2007), JPCS **110** 062005 (2008).

Cosmic Ray Physics: Gammas and Neutrinos (IceCube Collaboration, Bernardini et al.), Proc. of the Euro. Phys. Soc. Conf. on High Energy Physics, Manchester, UK (2007), JPCS **110** 012007 (2008).

Neutrino Physics with the IceCube Detector (IceCube Collaboration, Kiryluk et al.), Lake Louise Winter Institute, Alberta, Canada (2008); astro-ph/08061717.

High-Energy Neutrinos from the Cold: Status and Prospects of the IceCube Experiment (IceCube Collaboration, Portello-Roucelle et *al*.), Proc. of 43rd Rencontres de Moriond – *Electroweak Interactions and Unified Theories*, La Thuile, Val d'Aosta, Italy (2008) 415.

The IceCube Cosmological Connection: Status and Prospects of the Polar Neutrino Observatory (IceCube Collaboration, Ribordy et *al.*), 43rd Rencontres de Moriond – *Cosmology*, La Thuile, Italy (2008); astro-ph/08053546.

Status and Prospects of the IceCube Neutrino Telescope (IceCube Collaboration, Resconi et al.), Proc. of the 3rd Intl. Workshop on a Very–Large-Volume Neutrino Telescope for the Mediterranean Sea (VLVnT08), Toulon, France, Nucl. Instrum. and Meth. A **602** 7 (2009); astro-ph/08073891.

Neutrinos from Auger Sources (with A. O'Murchadha), Proc. of 4th Intl. Workshop on Neutrino Oscillations in Venice, *ed.* M. Baldo Ceolin, Venice, Italy 159 (2008); astro-ph/0802.0887.

Neutrino Astronomy with the IceCube Observatory and Implications for Astroparticle Physics (IceCube Collaboration, Desiati et al.), Vulcano Workshop 2008, Vulcano, Italy; astro-ph/ 0812.4004.

IceCube: A Cubic Kilometer Radiation Detector (IceCube Collaboration, Klein et al.), Proc. of Symposium on Radiation Measurement and Applications (SORMA) West 2008, Berkeley, California, IEEE Trans. Nucl. Sci. **56** 1141 (2009); physics.ins-det/0807.0034.

Recent νs from IceCube (IceCube Collaboration, Klein et al.), Proc. of the XXIIIrd Intl. Conf. on Neutrino Physics and Astrophysics (Neutrino 08), Christchurch, New Zealand, Journal of Physics Conf. Series **136** 022050 (2008); astro-ph/0810.0573.

Results from Seven Years of AMANDA-II (IceCube Collaboration, DeYoung et al.), Proc. of Neutrino 08, JPCS **136** 022046 (2008); astro-ph/0810.4513.

Optimization of Final Configuration of IceCube for Increased High-Energy Response (IceCube Collaboration, Karle et al.), Proc. of Neutrino 08, JPCS **136** 042059 (2008).

Searches for Diffuse Astrophysical Muon-Neutrino Fluxes with IceCube (IceCube Collaboration, Hill et al.), Proc. of Neutrino 08, JPCS **136** 042058 (2008).

IceCube Science, Proc. of Symposium on Prospects in Physics of Discrete Symmetries (Discrete 08), Valencia, Spain, JPCS **171** 012013 (2009); astro-ph.HE/0901.4722.

Search for Neutralino Dark Matter with the AMANDA Neutrino Telescope and Prospects for IceCube (IceCube Collaboration, Rizzo et al.), Proc. of the 4th Intl. Workshop on the Dark Side of the Universe, Cairo, Egypt (2008), AIP Conf. Proc. **1115** 42 (2009).

Measurement of Acoustic Properties of South Pole Ice for Neutrino Astronomy (IceCube Collaboration, Vandenbroucke et al.), Proc. of the 3rd Intl. Workshop on Acoustic and Radio EeV Neutrino Detection Activities (ARENA 2008), Rome, Italy, Nucl. Instrum. and Meth. A **604** S164 (2009); astro-ph/0811.1087.

Acoustic Noise in Deep Ice and Environmental Conditions at the South Pole (IceCube Collaboration, Karg et al.), Proc. of ARENA 2008, NIMA **604** S171 (2009); astro-ph/ 0811.1099.

HADES – Hydrophone for Acoustic Detection at South Pole (IceCube Collaboration, Semburg et al.), ARENA 2008, NIMA **604** S215 (2009); astro-ph/ 0811.1114.

Measurement of Sound Speed versus Depth in Antarctic Ice with the South Pole Acoustic Test Setup (IceCube Collaboration, Descamps et al.), Proc. of ARENA 2008, NIMA **604** S175 (2009); astro-ph/0811.1797.

AURA – A Radio Frequency Extension to IceCube (IceCube Collaboration, Landsman et al., with P. Kenny, L. Ruckman, and G.S. Varner), Proc. of ARENA 2008, NIMA **604** S70 (2009); astro-ph/0811.2520.

IceRay: An IceCube-Centered Radio GZK Array (with P. Allison et al.), Proc. of ARENA 2008, NIMA **604** S64 (2009); astro-ph/0904.1309.

IceCube: Construction Status and First Results (IceCube Collaboration, Karle et al.), Proc. of ARENA 2008, NIMA **604** S64 (2009); astro-ph/0812.3981v1.

IceCube Science, Proc. of the Carolina Intl. Symposium on Neutrino Physics, Columbia, South Carolina (2008), J. of Phys. Conf. Series **173** 012021 (2009); astro-ph.HE/0901.4722.

Search for Sources of Astrophysical Neutrinos with IceCube (IceCube Collaboration, Groβ et al.), Proc. of 4th Intl. Mtg. on High-Energy Gamma-Ray Astronomy, Heidelberg, Germany, AIP Conf. Proc. **1085** 779 (2009).

The IceCube DeepCore (IceCube Collaboration, Schulz et al.), Proc. of 4th Intl. Mtg. on High-Energy Gamma-Ray Astronomy, AIP Conf. Proc. **1085** 783 (2009).

Cosmic-Ray Results from the IceTop Air Shower Array (IceCube Collaboration, Kolanoski et al.), Proc. of the 34th Intl. Conf. on High Energy Physics (ICHEP08), Philadelphia, Pennsylvania, 364; astro-ph/0810.3409.

Neutrino Oscillation Measurements with IceCube (IceCube Collaboration, Rott et al.), Proc. of ICHEP08 394; astro-ph/0810.3698.

Search for Dark Matter with the AMANDA and IceCube Neutrino Detectors (IceCube Collaboration, De Clerq et al.), Proc. of the Identification of Dark Matter (IDM 2008), Stockholm, Sweden, PoS (idm2008) 034.

Searching for Quantum Gravity with AMANDA and IceCube (IceCube Collaboration, Kelley et al.), Proc. of The Impact of High-Energy–Astrophysics Experiments on Cosmological Physics, KICP, Chicago, Illinois (2008).

Searches for Neutrino Point Sources with AMANDA and IceCube (IceCube Collaboration, Braun et al.), Proc. of The Impact of High-Energy–Astrophysics Experiments on Cosmological Physics, KICP, Chicago, Illinois (2008).

Searching for SUSY with IceCube (IceCube Collaboration, Olivas et al.), TeV 2008, Beijing, China (2008).

Future Detection Methods in IceCube: Recent Results of SPATS (IceCube Collaboration, Karg et al.), TeV 2008, Beijing, China (2008)

Neutrino Point-Source Search with the 22-String Detector Configuration of IceCube (IceCube Collaboration, Finley et al.), TeV 2008, Beijing, China (2008).

Recent Results from IceCube (IceCube Collaboration, Blaufuss et al.), TeV 2008, Beijing, China (2008).

GeV-TeV Gamma Rays from Galactic IceCube Sources (IceCube Collaboration, Kappes et al.), TeV 2008, Beijing, China (2008).

Recent Results of Searches for Astrophysical Neutrinos in Coincidence with Gamma-Ray Bursts (IceCube Collaboration, Strahler et al.), TeV 2008, Beijing, China (2008).

Point-Source Searches in IceCube (IceCube Collaboration, Dumm et al.), XXth Rencontres de Blois - Challenges in Astroparticle Physics (2008).

News from the South Pole: Recent Results from the IceCube and AMANDA Neutrino Telescopes (IceCube Collaboration, Kappes et al.), Proc. of the 18th Intl. Conf. on Particles and Nuclei (PANIC ’08), Nucl. Phys. A **827** 567c (2009).

Searching for Quantum Gravity with High-Energy Atmospheric Neutrinos and AMANDA-II (IceCube Collaboration, Kelley et al.), PANIC '08, Nucl. Phys. A **827** 507c (2009).

Search for Neutrino Point Sources with IceCube 22-Strings (IceCube Collaboration, Bazo Alba et al.), Proc. of the Neutrino Oscillation Workshop (NOW 2008), Conca Specchiulla, Italy, Nucl. Phys. B **188** 267 (2009); astro-ph/0811.4110.

Neutrino Astronomy in the Ice (IceCube Collaboration, Montaruli et al.), Proc. of NOW 2008, Nucl. Phys. B **188** 239 (2009); astro-ph.IM/0901.2664.

First Results from the IceTop Air Shower Array (IceCube Collaboration, Klepser et al.), Proc. of 21st European Cosmic Ray Symposium (ECRS 2008), Košice, Slovakia, 487; astro-ph/ 0811.1671.

IceCube: Status and First Results (IceCube Collaboration, Berghaus et al.), Proc. of the Cosmic Ray Intl. Seminar (CRIS 2008), Malfa, Salina Island, Italy, Nucl. Phys. B **190** 127 (2009); astro-ph/0812.2883.

DeepCore: Opening a New Energy Window for the IceCube Neutrino Observatory (IceCube Collaboration, Grant et al.), Novel Searches for Dark Matter Workshop, CCAPP, Ohio State U., Columbus, Ohio (2008).

Overview of IceCube/AMANDA WIMP Searches (IceCube Collaboration, Wikström et al.), Novel Searches for Dark Matter Workshop, Columbus, Ohio (2008).

Status of the IceCube Neutrino Observatory (IceCube Collaboration, Williams et al.), Miami 2008, U. of Miami, Florida.

The Hunt for Cosmic Neutrino Sources with IceCube (IceCube Collaboration, Bernardini et al.), Proc. of the 6th Workshop on Science with the New Generation of High-Energy Gamma-Ray Experiments, Padova, Italy, AIP Conf. Proc. **1112** 138 (2009); astro-ph.IM/0901.1049.

Search for Dark Matter with AMANDA and IceCube Detectors (IceCube Collaboration, Rizzo et al.), Proc. of the 7th Intl. Heidelberg Conf. on Dark Matter in Astro and Particle Physics (Dark 2009), Christchurch, New Zealand, World Scientific 494 (2009).

Recent Results and Status of IceCube (IceCube Collaboration, Seo et al.), Proc. of Dark 2009, Christchurch, New Zealand, World Scientific 482 (2009).

Muons in IceCube (IceCube Collaboration, Berghaus et al.), Proc. of the XV Intl. Symposium on Very–High-Energy Cosmic-Ray Interactions (ISVHECRI 2008), Paris, France, Nucl. Phys. B **196** 261 (2009); astro-ph.HE/0902.0021.

Status, Performance and First Results of the IceTop Array (IceCube Collaboration, Stanev et al.), Proc. of ISVHECRI 2008, Nucl. Phys. B **196** 159 (2009); astro-ph.HE/0903.0576.

IceCube3 – A New Window on the Universe (IceCube Collaboration, Gaisser et al., with D. Robertson), Proc. of the 3rd Latin American School on Cosmic Rays and Astrophysics, Arequipa, Peru, AIP Conf. Proc. **1123** 177 (2009); astro-ph.IM/0901.4294.

Searches for Neutrinos from GRBs with IceCube (IceCube Collaboration, Taboada et al.), Proc. of the 6th Huntsville Gamma-Ray Burst Symposium 2008, Huntsville, Alabama, AIP Conf. Proc. **1133** 431 (2009).

Extended Search for Point Sources of Neutrinos Below and Above the Horizon: Covering Energies from TeV to EeV with IceCube (IceCube Collaboration, Lauer et al.), Proc. of the 2nd Heidelberg Workshop on High-Energy Gamma Rays and Neutrinos from Extra-Galactic Sources, Heidelberg, Germany (2009), J. of Mod. Phys. D **18** 1587; astro-ph.HE/0903.5434.

Searches for a Diffuse Flux of Extraterrestrial Muon Neutrinos with the IceCube Observatory (IceCube Collaboration, Demirörs et al.), Proc. of the 2nd Heidelberg Workshop (2009), J. of Mod. Phys. D **18** 1603.

Gamma-Ray Burst Detection with IceCube (IceCube Collaboration, Kappes et al.), Proc. of the 2nd Heidelberg Workshop (2009), Int. J. of Mod. Phys. D **18** 1561.

Recent Results of Point-Source Searches with the IceCube Neutrino Telescope (IceCube Collaboration, Strahler et al.), Lake Louise Winter Institute (2009); astro-ph.HE/0905.4705.

Status and Results from the IceCube Neutrino Observatory (IceCube Collaboration, Kohnen et al.), 44th Rencontres de Moriond: *Very–High-Energy Phenomena in the Universe*, Les Arcs, France (2008).

IceCube: Neutrinos Associated with Cosmic Rays, Proc. of the 10th Conf. on the Intersections of Particle and Nuclear Physics (CIPANP 2009), San Diego, California, AIP Conf. Proc. **1182** 14 (2009); astro-ph.HE/0906.3470.

Neutrino Astronomy, Multi-Messenger Relativistic Astrophysics, Atlanta, Georgia (2009).

Point-Source Searches in IceCube (IceCube Collaboration, Dumm et al.), Multi-Messenger Relativistic Astrophysics, Atlanta, Georgia (2009).

IceCube: Its Science and Some Recent Results (IceCube Collaboration, Bai et al.), 1st Workshop on Gamma-Ray Astronomy at High Altitude, ShiJiaZhuang, China (2009).

Neutrinos from Cosmic-Ray Sources (with M.C. González-García et al.), Proc. of XIIIth Intl. Workshop on Neutrino Telescopes, Venice, Italy, Istituto Veneto di Scienze, Lettere ed Arti, *ed.* M. Baldo Ceolin, 17 (2009).

The Physics Potential of IceCube's DeepCore Sub-Detector (IceCube Collaboration, Cowen et al.), Proc. of XIIIth Intl. Workshop on Neutrino Telescopes, Venice, Italy, 253 (2009).

The Search for Dark Matter with Neutrinos, Cosmo 09: Intl. Workshop on Particle Physics and the Universe, Geneva, Switzerland.

Recent Results from IceCube and AMANDA (IceCube Collaboration, de Young et al.), Proc. of the 2009 Meeting of the Division of Particles and Fields of the American Physical Society (DPF-2009), Detroit, Michigan, SLAC eConf C090726; astro-ph.HE/09103644.

Results from IceCube (IceCube Collaboration, Spiering et al.), Proc. of European Physical Society Conf. on High Energy Physics, Krakow, Poland, PoS EPS-HEP 2009 101.

Kilometer-Scale Neutrino Detectors: First Light, CCAPP Symposium 2009, Columbus, Ohio (2009); astro-ph.HE/09112676.

Search for Dark Matter from the Galactic Halo with IceCube (IceCube Collaboration, Rott et al.), CCAPP Symposium 2009, Columbus, Ohio (2009); astro-ph.HE/09125183.

Cosmic-Ray Anisotropy with IceCube (IceCube Collaboration, Abbasi et al.), CCAPP Symposium 2009, Columbus, Ohio (2009).

Using Reconstruction Uncertainty in an Active DeepCore Veto (IceCube Collaboration, Davis et al.), CCAPP Symposium 2009, Columbus, Ohio (2009).

The Search for Extra-Terrestrial Sources of High-Energy Neutrinos with IceCube (IceCube Collaboration, Hill et al.), CCAPP Symposium 2009, Columbus, Ohio (2009).

Cosmic-Ray Accelerators with IceCube (IceCube Collaboration, Resconi et al.), Searching for the Origins of Cosmic Rays (SOCOR 2009), Trondheim, Norway.

IceCube: The Rationale for Kilometer-Scale Neutrino Detectors, 21st Rencontres de Blois, “Windows on the Universe” (2009); astro-ph.HE/09100436.

IceCube Searches for Transient Sources (IceCube Collaboration, Franckowiak et al.), Workshop on Gravitational Waves and High-Energy Neutrinos (GW + HEN), Paris, France (2009).

Neutrino Astrophysics with IceCube (IceCube Collaboration, Hanson et al, Proc. of the 12th Marcel Grossman Meeting on General Relativity, Paris, France (World Scientific, Singapore), *ed.* T. Damour, R.T. Jantzen and R. Ruffini (2009).

Search for Neutrinos of Astrophysical Origin (IceCube Collaboration, Gross et al.), Proc. of the Intl. Conf. on Topics in Astroparticle and Underground Physics (TAUP 2009), Rome, Italy, J. Phys. Conf. Series **203**, *ed.* E. Coccia et al (2009).

Results and Prospects of Dark-Matter Searches with IceCube (IceCube Collaboration, Wikström et al.), Proc. of TAUP 2009, JPCS **203** (2009).

Recent Results from IceCube Neutrino Laboratory (IceCube Collaboration, Groβ et al.), 15th Intl. Symposium on Particles, Strings and Cosmology, Hamburg, Germany (2009).

Search Strategies for Discovering Extraterrestrial Neutrinos with IceCube (IceCube Collaboration, Sestayo et al.), 4th Intl. Workshop on a Very–Large-Volume Neutrino Telescope for the Mediterranean Sea (VLVnT09), Athens, Greece, Nucl. Instrum. Meth A **626-7** S196 (2011).

IceCube: Physics, Status and Future (IceCube Collaboration, Hultqvist et al.), VLVnT09, Athens, Greece; astro-ph.HE/10032300.

Search for Neutrino Point Sources with the IceCube Neutrino Observatory (IceCube Collaboration, Aguilar et al.), TeVPA 2009, Menlo Park, California.

Acoustic Neutrino Detection at the South Pole: Latest Results from SPATS (IceCube Collaboration, Tosi et al.), TeVPA 2009, Menlo Park, California.

Searching for High-Energy Diffuse Astrophysical Muon Neutrinos with IceCube (IceCube Collaboration, Grullon et al.), Proc. of 2010 Lake Louise Winter Institute, also presented a similar version at TeVPA 2009, Menlo Park, California, and 1st Multi-Messenger Relativistic Astrophysics, Atlanta, Georgia; astro-ph.HE/10054962.

High-Energy Neutrino Astronomy with IceCube (IceCube Collaboration, Taboada et al.), Neutrinos and Dark Matter (NDM 2009), Madison, Wisconsin.

Neutrino Astrophysics with IceCube (IceCube Collaboration, Braun et al.), Implications of Neutrino Flavor Oscillations (INFO 2009), Santa Fe, New Mexico.

IceCube (IceCube Collaboration, de los Heros et al.), Proc. of Roma Intl. Conf. on Astro-Particle Physics (RICAP 2009), Rome, Italy, Nucl. Instrum Meth A **630** 119 (2011).

Dark-Matter Searches and Fundamental Neutrino Measurements with IceCube-DeepCore (IceCube Collaboration, Grant et al.), 22nd Intl. Workshop on Weak Interactions and Neutrinos (WIN 2009), Perugia, Italy.

IceCube Neutrino Observatory at the South Pole: Recent Results (IceCube Collaboration, Filimonov et al.), Proc. of XXVII Intl. Astronomical Union Genl. Assembly, Rio de Janeiro, Brazil, **5** H15 620 (2009).

IceCube and DeepCore: Selected Results and Perspectives (IceCube Collaboration, Desiati et al.), Workshop on Next-Generation Nucleon Decay and Neutrino Detectors (NNN09), Estes Park, Colorado.

Neutrino Physics with the IceCube Detector (IceCube Collaboration, Kiryluk et al.), Intl. Conf. on Neutrino Physics in the LHC Era, Luxor, Egypt (2009).

Large-Scale Cosmic-Rays Anisotropy as Observed with IceCube (IceCube Collaboration, Abbasi et al.), Proc. of High-Energy Phenomena in Relativistic Outflows II, Buenos Aires, Argentina (2009), Intl. J. of Mod. Phys. D **19** 6 1041, *ed.* G.E. Romero, F.A. Aharonian and J.M. Paredes (2010).

Dark-Matter Searches with IceCube (IceCube Collaboration, Rott et al.), 2nd Snowbird Workshop on Particle Astrophysics, Astronomy & Cosmology (SNOWPAC), Snowbird, Utah (2009).

Cosmic-Ray Physics with the Air Shower Array IceTop at the South Pole (IceCube Collaboration, Kolanoski et al.), SNOWPAC (2009).

Large-Scale Cosmic-Ray Anisotropy Measurements with IceCube (IceCube Collaboration, Abbasi et al.), SNOWPAC (2009).

IceCube Neutrino Observatory (IceCube Collaboration, Abbasi et al.), Proc. of Intl. Mtg. on High-Energy Phenomena in Relativistic Outflows II (HEPRO 2009), Buenos Aires, Argentina, Int. J. Mod.Phys. D **19** 1041 (2010).

Searches for Signatures of Dark Matter with the IceCube Neutrino Telescope (IceCube Collaboration, Strahler et al.), 45th Rencontres de Moriond - Cosmology, La Thiule, Italy (2010).

Dark-Matter Searches with the IceCube Neutrino Telescope (IceCube Collaboration, LaFebre et al.), 45th Rencontres de Moriond - Cosmology, La Thiule, Italy (2010).

Ultra–High-Energy Tau Neutrino Search in IceCube (IceCube Collaboration, Seo et al.), Proc. of ACM Intl. Workshop on Timing Issues in the Specification and Synthesis of Digital Systems (TAU 2010), San Francisco, California, Nucl. Phys. B **218** 314.

Search for Neutrino Point Sources with the IceCube Neutrino Observatory (IceCube Collaboration, Aguilar et al.), Proc. of Frontier Objects in Astrophysics and Particle Physics, Vulcano, Italy (2010), Società italiana di fisica 103 (2011); astro-ph.IM/10106263.

The IceTop Experiment in 2010 (IceCube Collaboration, Stanev et al.), Proc. of Vulcano Workshop 2010 103 (2011); astro-ph.HE/10111879.

IceCube: Neutrino Messages from GRBs (IceCube Collaboration, Kappes et al.), Proc. of Deciphering the Ancient Universe with Gamma-Ray Bursts, Kyoto, Japan, AIP Conf. Proc. **1279** 234 (2010); astro-ph.HE/10074629.

IceCube's In-Ice Radio Extension: Status and Results (IceCube Collaboration, Landsman with E. Cheng et al.), Proc. of 4th Intl. Workshop on Acoustic and Radio EeV Neutrino Detection Activities (ARENA 2010), Nantes, France, Nucl. Instrum. and Meth. A **662** 1 S54 (2012); astro-ph.IM/10103949.

Acoustic Transient-Event Reconstruction and Sensitivity Studies with the South Pole Acoustic Test Setup (IceCube Collaboration, Berdermann et al.), Proc. of ARENA 2010, NIMA **662** 1 S46 (2012); astro-ph.IM/10072841.

Research and Calibration of Acoustic Sensors in Ice within the SPATS Project (IceCube Collaboration, Paul et al.), Proc. of ARENA 2010, NIMA **662** 1 S230 (2012); astro-ph.IM/10102313.

Status and Recent Results of the South Pole Acoustic Test Setup (IceCube Collaboration, Karg et al.), Proc. of ARENA 2010, NIMA **662** 1 S36 (2012); astro-ph.IM/10072025.

A Radio Air-Shower Test Array (RASTA) for IceCube (IceCube Collaboration, Böser et al.), Proc. of ARENA 2010, NIMA **662** 1 S66 (2012); astro-ph.HE/10101737.

The Search for the Sources of the Cosmic Rays One Century after Their Discovery, Proc. of XVI Intl. Symposium on Very–High-Energy Cosmic-Ray Interactions (ISVHECRI 2010), Batavia, IL, e-confC1006284; astro-ph.HE/10100235.

Latest Results from the IceCube Experiment (IceCube Collaboration, Brown et al.), 19th Australian Institute of Physics Conf., Melbourne (2010); astro-ph.HE/10121633.

Neutrino Astrophysics and Galactic Cosmic-Ray Anisotropy in IceCube (IceCube Collaboration, Desiati et al.), Proc. of the 5th Intl. Conf. on Beyond the Standard Models of Particle Physics, Cosmology and Astrophysics (BEYOND 2010), Cape Town, South Africa, World Scientific 376 (2010); astro-ph.IM/10072621v2.

IceCube, Exotic Nuclei and Nuclear/Particle Astrophysics (III): From nuclei to stars, Sianaia, Romania, AIP Conf. Proc. **1304** 268 (2010).

Search for a Neutrino Flux from LS I + 61° 303 Based on a Time-Dependent Model with IceCube (IceCube Collaboration, Demirörs et al.), XXIV Intl. Conf. on Neutrino Physics & Astrophysics (Neutrino 2010), Athens, Greece, Nucl. Phys. B **229** 532 (2012); astro-ph.HE/10115102.

Astrophysical Tau Neutrino Searches with IceCube (IceCube Collaboration, Seo et al.), Neutrino 2010, Nucl. Phys. B **229** 551(2012).

Recent Results and Future Prospects of the South Pole Acoustic Test Setup (IceCube Collaboration, Nahnhauer et al.), Neutrino 2010, Nucl. Phys. B **229** 535 (2012).

High-Energy Neutrino Astronomy: IceCube 22 and 40 Strings (IceCube Collaboration, Resconi et al.), Neutrino 2010, Nucl. Phys. B **229** 267 (2012); astro-ph.HE/ 10120415.

Status of DeepCore at the IceCube Neutrino Observatory (IceCube Collaboration, Koskinen et al.), Neutrino 2010, Nucl. Phys. B **229** 555 (2012).

Physics Potential of the IceCube DeepCore Detector (IceCube Collaboration, Koskinen et al.), Neutrino 2010, Nucl. Phys. B **229** 554 (2012).

IceCube DeepCore: A Neutrino Detector at the Heart of IceCube (IceCube Collaboration, Cowen et al.), Neutrino 2010, Nucl. Phys. B **229** (2012).

Dark Matter Searches with IceCube (IceCube Collaboration, de los Heros et al.), 8th Intl. Workshop on Identification of Dark Matter (IDM 2010), Monpellier, France, PoS 064; astro-ph.HE/10120184.

Cosmic-Ray Physics with IceCube (IceCube Collaboration, Gaisser et al.), Proc. of COSPAR-10-E18, Bremen, Germany (2010), Advances in Space Research **51** 2 242 (2013); astro-ph.IM/11071690.

The IceCube Neutrino Observatory: Status and Initial Results (IceCube Collaboration, DeYoung et al.), COSPAR-10-E18, Advances in Space Research **51** 2 238 (2013).

The IceCube Neutrino Observatory: Status & initial results (IceCube Collaboration, Karg et al.), Proc. of 22nd European Cosmic-Ray Symposium (ECRS 2010), Turku, Finland; Astrophys. Space Sci. Trans. **7** 1577 (2011); astro-ph.HE/10115027.

Directional Correlations between UHECRs and Neutrinos Observed with IceCube (IceCube Collaboration, Lauer et al.), Proc. of. ECRS 2010, Astrophys. Space Sci. Trans. **7** 201 (2011); astro-ph.HE/10111093.

Neutrinos from Starburst Galaxies: A source-stacking analysis of AMANDA II and IceCube data (IceCube Collaboration, Dreyer et al.), Proc. of ECRS 2010, Astrophys. Space Sci. Trans. **7** 7 (2011).

Measurement of the All-Particle Cosmic-Ray Energy Spectrum with IceTop (IceCube Collaboration, Kislat et al.), ECRS 2010, Astrophys. Space Sci. Trans. **7** 175 (2011).

Observation of the Anisotropy in Arrival Direction of Cosmic Rays with IceCube (IceCube Collaboration, Toscano et al.), Proc. of the Cosmic-Ray Intl. Seminar (CRIS 2010), Catania, Italy, Nucl. Phys. B **212** 201 (2011); astro-ph.HE/10115428.

IceCube and Searches for Astrophysical Sources (IceCube Collaboration, Montaruli et al.), Proc. of CRIS 2010, Nucl. Phys. B **212** 99 (2011); astro-ph.HE/10120881.

Cosmic-Ray Detection with IceTop / IceCube (IceCube Collaboration, Waldenmaier et al.), 12th Intl. Conf. on Advanced Technology and Particle Physics (ICATPP 2010), Como, Italy.

Status of the DeepCore Detector (IceCube Collaboration, Grant et al.), ICATPP 2010.

Neutrino Astronomy and IceCube (IceCube Collaboration, Montaruli et al.), Proc. of 6th Patras Workshop on Axions, WIMPS and WISPS, Zurich, Switzerland (2010); DESY-PROC-2010-03 14; www-library.desy.de/preparch/desy/proc/proc10-03.html.

Neutrino Point Sources: Search Strategies and Results from IceCube (IceCube Collaboration, Odrowski et al.), TeV Particle Astrophysics, Paris, France (TeVPA 2010); irfu.cea.fr/ Meetings/TeVPA/ Tues. 14:30

Observation of Structure in the Arrival Directions of Cosmic Rays at TeV with IceCube (IceCube Collaboration, BenZvi et al.), TeVPA 2010; irfu.cea.fr/ Meetings/TeVPA/ Mon. 16:03

Cosmic-Ray Physics with IceCube (IceCube Collaboration, Berghaus et al.), TeVPA 2010; irfu.cea.fr/Meetings/TeVPA/ Mon.15:35

Searches for Dark Matter Annihilations in the Sun & Earth with IceCube and DeepCore (IceCube Collaboration, Danninger et al.), TeVPA 2010; irfu.cea.fr/Meetings/TeVPA/ Thurs. 17:00

Search for Neutrinos from the Dark Matter Halo of the Galaxy with IceCube (IceCube Collaboration, Hülß et al.), TeVPA 2010; irfu.cea.fr/Meetings/TeVPA/ Thurs. 16:40

Status of the IceCube Neutrino Observatory (IceCube Collaboration, Williams et al.), TeVPA 2010; http://irfu.cea.fr/Meetings/TeVPA/ Tues.12:10

IceCube DeepCore: Sensitivity Study for the Southern Hemisphere (IceCube Collaboration, Colnard et al.), TeVPA 2010; http://irfu.cea.fr/Meetings/TeVPA/ Tues. 15:30

High-Energy Neutrino Astrophysics: Where We Are and Where We Go (IceCube Collaboration, Yoshida et al.), Intl. Symposium on the Recent Progress of Ultra–High-Energy Cosmic-Ray Observation, Nagoya, Japan (2010).

Multi-Messenger Astrophysics with IceCube (IceCube Collaboration, Ribordy et al.), Proc. of 8th Workshop on Science with the New Generation of High-Energy Gamma-Ray Experiments (SciNeGHE 2010), Trieste, Italy, Il Nuovo Cimento C **34** 3 113 (2011); astro-ph.HE/ 11011187.

Searches for Neutrino Point Sources with the IceCube Observatory (IceCube Collaboration, Baker et al.), SciNeGHE 2010, Il Nuovo Cimento C **34** 3 123 (2011).

Astrophysical ν_τ Search in IceCube (IceCube Collaboration, Zarzhitsky et al.), Miami 2010, Miami, Florida; http://cgc.physics.miami.edu/Miami2010/.

Results from IceCube (IceCube Collaboration, Berghaus et al.), Proc. of XXIst Rencontres de Blois - Particle Physics and Cosmology - *First Results from the LHC*; confs.obspm.fr/Blois2010/Blois2010-Program-Parallel.html Sat. 16:30 (2010).

Search for Dark Matter with IceCube (IceCube Collaboration, De Clercq et al.), Dark Matter in the LHC Era, Kolkata, India (2011); saha.ac.in/cs/dark.matter/talks.html

Status and Results of the IceCube Experiment (IceCube Collaboration, Becker et al.), PNeutrino Oscillation Workshop (NOW 2010), Otranto, Lecce, Italy, Nucl. Phys. B. **217** 269 (2011).

Detecting Astrophysical Neutrinos with the IceCube Neutrino Observatory (IceCube Collaboration, Finley et al.), Proc. of the 35th Intl. Conf. on High-Energy Physics (ICHEP 2010), Paris, France, PoS 429.

Searches for Dark Matter with the IceCube Neutrino Telescope (IceCube Collaboration, Strahler et al.), 18th Intl. Conf. on Supersymmetry and Unification of Fundamental Interactions (SUSY 10), Bonn, Germany (2010).

IceCube DeepCore Physics (IceCube Collaboration, Williams et al.), DUSEL Physics Workshop, Rapid City, South Dakota (2010); odessa.phy.sdsmt.edu/~bai/dusel/ collections.php

Results and Prospects of Dark-Matter Searches with IceCube (IceCube Collaboration, Rott et al.), Darkness Visible 2010, Cambridge, UK; ast.cam.ac.uk/ioa/meetings/ dv10/programme.php

Recent Results from Searches for High-Energy Neutrinos with IceCube (IceCube Collaboration, Ishihara et al.), Proc. of the 25th Symposium on Relativistic Astrophysics (Texas 2010), Heidelberg, Germany, PoS **123** 213.

Search for Transient Neutrino Sources with IceCube (IceCube Collaboration, Franckowiak et al.), Texas 2010, Heidelberg, Germany; astro-ph.HE/11110335.

Multi-Messenger Observations of Gamma-Ray Bursts (IceCube Collaboration, Taboada et al.), Proc. of Gamma Ray Bursts (GRB 2010), Annapolis, MD, AIP Conf. Proc. **1358** 365 (2010).

Search for Neutrinos from GRBs with IceCube (IceCube Collaboration, Blaufuss, Meagher, Whitehorn et al.), Proc. of GRB 2010, AIP Conf. Proc. **1358** 351 (2010).

Searches for the Highest-Energy Neutrinos with IceCube (IceCube Collaboration, Ishihara et al.), Cosmo Intl. Conf. on Particle Physics and Cosmology / Intl. Symposium on Cosmology and Particle Astrophysics (COSMO/CosPA 2010), Tokyo, Japan; resceu.s.u-tokyo.ac.jp/symposium/cosmocospa2010/oral.php.

Supernova Neutrino Detection with IceCube (IceCube Collaboration, Köpke et al.), Proc. of 5th Symposium on Large TPCs for Low-Energy Rare Events & Workshop on Neutrinos from Supernovae, Paris, France (2010), JPCS **309** 012029 (2011); astro-ph.HE/11066225.

Neutrino Point-Source Search in IceCube (IceCube Collaboration, Aguilar et al.), Lake Louise Winter Institute 2011; indico.triumf.ca/confAuthorIndex.py?confId=1138

Searching for a Diffuse Flux of Ultra–High-Energy Neutrinos with IceCube (IceCube Collaboration, Johansson et al.), Lake Louise Winter Institute 2011; indico.triumf.ca/confAuthorIndex.py?confId=1138.

IceCube Neutrino Telescope (IceCube Collaboration, Koskinen et al.), 23rd Intl. Workshop on Weak Interactions and Neutrinos (WIN 2011), Cape Town, South Africa (2011).

Data Mining (IceCube Collaboration, Ruhe et al.), Joint Workshop and Summer School on Astrostatistics and Data Mining (GREAT 2011), La Palma, Canary Islands, Spain, and ADASS XXI (2011), Paris, France.

Particle Astrophysics: Extreme Astronomy, Frontiers in Particle and Astrophysics, Lisbon, Portugal (2011).

Earthbound vs. Heavenly Accelerators (Summary Talk), Physics in Collision, Vancouver, BC (2011), indico.cern.ch/contributionDisplay.py?contribId=23& confId=110992 Thurs 12:15

Searches for Dark Matter with IceCube (IceCube Collaboration, DeYoung et al.), Indirect and Direct Detection of Dark Matter, Aspen, Colorado (2011); slac.stanford.edu/exp/glast/aspen11/talks.asp.

Observation of a TeV Cosmic-Ray Anisotropy with IceCube (IceCube Collaboration, Westerhoff et al.), Workshop on Multi-Messenger Astronomy of Cosmic Rays, Kavli Institute, Beijing, China (2011); phy.pku.edu.cn/~lizhuo/CR2011/program.htm.

Optical Follow-Up of Neutrinos Detected by IceCube (IceCube Collaboration, Böser et al.), Neutrino and Gamma-Ray Multi-Messenger Workshop, Marseille, France (2011); indico.in2p3.fr/contributionListDisplay.py?confId=5171.

Catching Neutrinos with an IceCube (IceCube Collaboration, Labare et al.), Neutrino-Gamma Workshop, (2011); indico.in2p3.fr/contributionListDisplay.py?confId=5171.

Correlated Neutrino and Gamma-Ray Emission from Active Galactic Nuclei – An Estimation (with M. Doert et al.), Intl. Workshop on Beamed and Unbeamed Gamma Rays from Galaxies, Muonio, Finland (2011), JPCS **355** 012039.

IceCube – DeepCore and Beyond: Toward Precision Neutrino Physics at the South Pole (IceCube Collaboration, Grant et al.), Technology and Instrumentation in Particle Physics, Chicago (2011); indico.cern.ch/contributionDisplay.py?contribId=442& sessionId=17&confId=102998

IceCube as a Discovery Observatory for Physics beyond the Standard Model (IceCube Collaboration, Helbing et al.), 46th Rencontres de Moriond, Electroweak Interactions and Unified Theories, La Thuile, Val d'Aosta, Italy (2011); moriond.in2p3.fr/Proceedings/2011/Moriond_EW_2011.pdf, p. 353; astro-ph.HE/11075277.

The Shadow of the Moon in IceCube (IceCube Collaboration, Gladstone et al.), 46th Rencontres de Moriond, La Thiule, Italy (2011); moriond.in2p3.fr/Proceedings/ 2011/Moriond_EW_2011.pdf, p. 539; astro-ph.HE/11112969.

The Search for Cosmic-Ray Sources and Recent IceCube Results (IceCube Collaboration, Montaruli et al.), 23rd Rencontres de Blois, Particle Physics and Cosmology, Blois, France (2011); blois.in2p3.fr/2011/plenary_sessions.html (Fri 11:30).

IceCube: Status and Results (IceCube Collaboration, Gaisser et al.), Proc. of the XIV Intl. Workshop on Neutrino Telescopes, Venice, Italy, Venice 2011, Neutrino Telescopes 349 (2012); astro-ph.HE/11081838.

Physics at Neutrino Telescopes (IceCube and ANTARES collaborations, Montaruli et al.), Proc. of Venice 2011, Neutrino Telescopes 331 (2012).

Particle Physics in Ice with IceCube DeepCore (IceCube Collaboration, DeYoung et al.), Proc. of 3rd Roma Intl. Conf. on Astroparticle Physics (RICAP ’11), Rome, Italy, Nucl. Instrum. and Meth. A **692** 180; astro-ph.HE/11121053.

Astrophysical Neutrino Results: Overview and Comments (IceCube Collaboration, Gaisser et al.), Proc. of RICAP ’11, Rome, Italy, NIMA **692** 2 (2012); astro-ph.HE/ 12015637.

The South Pole Acoustic Test Setup (SPATS) (IceCube Collaboration, Laihem et al.), Proc. of RICAP ’11, Rome, Italy, NIMA **692** 192 (2012).

Observation of Anisotropy in the Arrival Direction Distribution of Cosmic-Rays above TeV Energies with IceCube (IceCube Collaboration, Toscano et al.), Proc. of RICAP ’11, Rome, Italy, NIMA **692** 165 (2012); astro-ph.HE/11102079.

Cosmic-Ray Spectrum and Composition: Implications for Neutrinos and *vice versa* (IceCube Collaboration, Gaisser et al.), Intl. Workshop on Cosmic Rays and Cosmic Neutrinos: “Looking at the Neutrino Sky” (NuSky 2011), Trieste, Italy; monday/gaisser-NUSKY.pdf.

Science Prospects of the Completed IceCube Neutrino Detector (IceCube Collaboration, Halzen et al.), NuSky 2011, Trieste, Italy; users.ictp.it/~smr2246/friday/halzen.pdf

IceCube Point-Source Results and CR Composition Sensitivity (IceCube Collaboration, Montaruli et al.), NuSky 2011, Trieste, Italy; users.ictp.it/~smr2246/monday/ montaruli.pdf

Galactic Cosmic-Ray Anisotropy in IceCube (IceCube Collaboration, Desiati et al.), NuSky 2011, Trieste, Italy; users.ictp.it/~smr2246/monday/desiati.pdf.

First Results from IceCube/DeepCore and Prospects for Low-Energy Physics in the Ice (IceCube Collaboration, Cowan et al.), NuSky 2011, Trieste, Italy; users.ictp.it/~smr2246/Friday/cowen.pdf.

The Latest Results from the IceCube Experiment (IceCube Collaboration, Kiryluk et al.), 19th Particles & Nuclei Intl. Conf. (PANIC11), Cambridge, MA, AIP Conf. Proc. **1441** 454 (2012).

Latest Results from IceCube (IceCube Collaboration, Woschnagg et al.), SLAC Summer Institute, Menlo Park, California (2011).

Results from High-Energy Neutrino Searches from Gamma-Ray Bursts with IceCube (IceCube Collaboration, Whitehorn et al.), Proc. of 12th Intl. Conf. on Topics in Astroparticle and Underground Physics (TAUP 2011), Munich, Germany, JPCS **375** 052033 (2012).

Detecting Extragalactic Supernova Neutrinos in the Ice of the South Pole (IceCube Collaboration, Kowalski et al.), TAUP 2011, Munich, Germany; LEN W2 taup2011.mpp.mpg.de/?pg=Agenda.

Recent Results from IceCube on High-Energy Neutrinos and Cosmic Rays (IceCube Collaboration, S. Böser et al.), TAUP 2011, Munich, Germany; AM W5; taup2011.mpp. mpg.de/?pg=Agenda.

Searches for Dark Matter with the IceCube Detector (IceCube Collaboration, Danninger et al.), 2011, Munich, Germany, J. Phys. Conf. Ser. **375** 012038 (2012).

The First-Year IceCube DeepCore Results: Observation of Atmospheric Neutrino-Induced Cascades (IceCube Collaboration, Ha et al.), Proc. of TAUP 2011, Munich, Germany, JPCS **375** 052034 (2012); hep-ex/12010801.

ECFA Review Panel for Future Accelerator-Based Neutrino Facilities, Intl. Europhsics Conf. on High-Energy Physics, Grenoble, France (2011); indico.in2p3.fr/contribution Display.py?contribId=1051&sessionId=15&confId=5116

Status Report on IceCube, Dark Matter Underground and in the Heavens (DMUH11), Geneva, Switzerland; indico.cern.ch/contributionDisplay.py?contribId=23&confId=110992

Cosmic Rays in IceCube (IceCube Collaboration, Berghaus et al.), 7th TeV Particle Astrophysics Conference (TeVPA), Stockholm, Sweden (2011); agenda.albanova.se/ conferenceOther Views.py?view=standard&confId=2600 (M 17:05).

Direct Supersymmetric Analyses with IceCube (IceCube Collaboration, Scott et al.), TeVPA, agenda.albanova.se/conferenceOtherViews.py?view=standard&confId=2600 (Tu 16:20).

High-Energy Astrophysics with Neutrino Telescopes (IceCube Collaboration, Taboada et al.), TeVPA, agenda.albanova.se/conferenceOtherViews.py?view=standard&confId=2600 (Tu 11:10).

Multi-Messenger Astrophysics with the IceCube Neutrino Observatory (IceCube Collaboration, Finley et al.), TeVPA, agenda.albanova.se/conferenceOtherViews.py? view= standard&confId=2600 (Tu 17:55).

Dark Matter Searches with IceCube (IceCube Collaboration, de los Heros et al.), TeVPA, agenda.albanova.se/conferenceOtherViews.py?view=standard&confId=2600 (Tu 16:00).

Neutrino Point-Source Search in IceCube (IceCube Collaboration, Aguilar et al.), TeVPA, agenda.albanova.se/conferenceOtherViews.py?view=standard&confId=2600 (Tu 14:30)

Recent Results from the IceCube Neutrino Telescope (IceCube Collaboration, Strahler et al.), Proceedings of 15th Lomonosov Conf. on Elementary Particle Physics, Moscow, Russia (2013) World Sci. 181, worldscientific.com/doi/pdf/ 10.1142/9789814436830_fmatter

Getting Science beyond the Research Community: Examples of Education & Outreach from the IceCube Project (IceCube Collaboration, Madsen et al.), APS Division of Particles and Fields, Providence, Rhode Island (2011); #369; indico.cern.ch/ contributionListDisplay.Py? confId=129980; astro-ph.IM/11101600

Status of the IceTop Air Shower Array at the South Pole (IceCube Collaboration, Kislat et al.), Proc. of 13th Intl. Conf. on Astroparticle, Particle Space Physics and Detectors for Physics Applications (ICATPP 2011), Como, Italy, World Scientific **7** 82 (2012); astro-ph.HE/ 12022790.

The South Pole Acoustic Test Setup as a Trailblazer toward an Acoustic Detection of Neutrinos (IceCube Collaboration, Berdermann et al.), Proc. of ICATPP 2011, Como, Italy, World Scientific **7** 455 (2012).

Sterile Neutrinos and IceCube (IceCube Collaboration, Huelsnitz et al.), NuFact'11, XIIIth Workshop on Neutrino Factories, Superbeams and Beta-beams, Geneva, Switzerland, JPCS **408** 012023 (2013); hep-ph/11110918.

Pionic Photons and Neutrinos from Cosmic-Ray Accelerators, presented at the Crakow School of Theoretical Physics, Crakow, Poland, Acta Phys. Polon. B **42** 2525 (2011); hep-ph/ 11111131.

The IceCube Observatory (IceCube Collaboration, Chirkin et al.), PACIFIC 2011, Moorea, French Polynesia; hepconf.physics.ucla.edu/pacific11/agenda.html Sun. 14:45

Results from IceCube (IceCube Collaboration, Resconi et al.), Proc. of 5th Very Large Volume Neutrino Telescope Workshop (VLVnT11), Erlangen, Germany Nucl. Instrum. and Meth A **725** 1 (2013).

Toward Precision Neutrino Physics with DeepCore and Beyond (IceCube Collaboration, DeYoung et al.), Proc. of VLVnT11, NIMA **725** 18 (2013).

Anisotropy of TeV Cosmic Rays with IceCube and IceTop (IceCube Collaboration, Santander et al.), Proc. of VLVnT11, NIMA **725** 85 (2013); astro-ph.HE/12053969.

Photon Tracking with GPUs in IceCube (IceCube Collaboration, Chirkin et al.), Proc. of VLVnT11, NIMA **725** 141 (2013).

Point-Source Searches by IceCube: Recent Results and Progress (IceCube Collaboration, Finley et al.), Proc. of VLVnT11, NIMA **725** 41 (2013).

Results on the Spectrum and Composition of Cosmic Rays from the IceTop Air Shower Array of the IceCube Observatory (IceCube Collaboration, Tilav et al.), Int'l Symposium on Very–High-Energy Cosmic-Ray Interactions (ISVHECRI 2012), Berlin, Germany, EPJ **52** 04002 (2013).

Atmospheric Muons as IceCube Signal (IceCube Collaboration, Berghaus et al.), Proc. of ISVHECRI 2012, EPJ **52** 09006 (2013)

Recent Results of a Search for Cosmogenic PeV to EeV Neutrinos with IceCube (IceCube Collaboration, Middell et al.), ISVHECRI 2012, EPJ **52** 09007 (2013).

IceCube – DeepCore – PINGU (IceCube Collaboration, Grant et al.), 12th Intl. Workshop on Next Generation Nucleon Decay and Neutrino Detectors (NNN11), Zurich Switzerland; laguna.ethz.ch/indico/conferenceOtherViews.py?view=standard&confId=1 Mon. 14:50

Status of IceCube (IceCube Collaboration, Rott et al.), Int'l. Workshop on Double Beta Decay and Neutrinos, Osaka, Japan (2011); dbd11.phys.sci.osaka-u.ac.jp/ program.html Nov. 17 15:10

New Results from the IceCube Neutrino Observatory (IceCube Collaboration, Westerhoff et al.), 3rd Galileo – Xu Guangqi Meeting, Beijing, China (2012).

Observation of a TeV Cosmic-Ray Anisotropy with IceCube (IceCube Collaboration, Westerhoff et al.), 3rd Galileo – Xu Guangqi Meeting, Beijing, China (2012).

IceCube – DeepCore – PINGU (IceCube Collaboration, Grant et al.), Lake Louise Winter Institute, Alberta (2012).

Neutrinos Associated with Cosmic Rays, Proc. of 5th Nuclear Physics in Astrophysics and 22nd Intl. Nuclear Physics Divisional Conf. of the European Physical Society, Eilat, Israel, J. Phys. Conf. Ser. **337** 012050 (2012).

Recent Results from IceCube on Neutrinos and Cosmic Rays (IceCube Collaboration, Böser et al.), Proc. of the XLVII Rencontres de Moriond, *EW Interactions and Unified Theories*, La Thuile, Val d'Aosta, Italy; moriond.in2p3.fr/Proceedings/2012/Moriond_ EW_2012.pdf, p. 385; astro-ph.HE/12056405.

Recent IceCube Results from Searches for Transient Neutrino Sources (IceCube Collaboration, Homeier et al.), Proc. of Gamma-Ray Bursts 2012, Munich, Germany, PoS 135.

Searches for Astrophysical Neutrinos with IceCube (IceCube Collaboration, Williams et al.), Proc. of the 24th Rencontres de Blois, France (2012).

IceCube Observatory: Neutrinos and the Origin of Cosmic Rays (IceCube Collaboration, Desiati and Tamburro et al.), Proc. of the XIV Vulcano Workshop, Vulcano, Italy, Acta Polytechnica **53** 769 (2013); astro-ph.HE/ 12107703.

Results from the IceCube Experiment (IceCube Collaboration, Sullivan et al.), Proc. of the XXV Intl. Conf. on Neutrino Physics and Astrophysics (Neutrino 2012), Kyoto, Japan, Nucl. Phys. B **235** 346 (2013); astro-ph.HE/12104195.

IceCube: Ultra–High-Energy Neutrinos (IceCube Collaboration, Ishihara et al.), Proc. of Neutrino 2012, Kyoto, Japan, Nucl. Phys. B **235** 352 (2013).

Neutrino Radiography with IceCube Neutrino Observatory (poster) (IceCube Collaboration, Hoshina et al and Hiroyuki Tanaka), Neutrino 2012, Kyoto, Japan.

Searches for Neutrinos from GRBs with IceCube (poster) (IceCube Collaboration, Blaufuss et al.), Neutrino 2012, Kyoto, Japan.

Supernova Detection with IceCube and Beyond (poster) (IceCube Collaboration, Bruijn et al.), Neutrino 2012, Kyoto, Japan.

Atmospheric Neutrino Oscillations with IceCube / DeepCore (poster) (IceCube Collaboration, Groβ et al.), Neutrino 2012, Kyoto, Japan.

Search for Secluded Dark Matter with the IceCube Neutrino Telescope (poster) (IceCube Collaboration, Groβ et al.), Neutrino 2012, Kyoto, Japan.

Results from IceCube (IceCube Collaboration, Kelley et al.), Beyond Standard Model in Particle Physics, Rencontres du Vietnam, Quy Nhon, Vietnam (2012).

Recent IceCube Results from GRB Neutrino Searches (IceCube Collaboration, Whitehorn et al.), Gravitational Wave Physics & Astronomy Workshop, Hannover, Germany (2012).

IceCube Neutrino Analyses Motivated by Fermi-LAT Observations (poster) (IceCube Collaboration, Kurahashi Neilson et al.), 4th Intl. Fermi Symposium, Monterey, CA (2012).

Recent IceCube Results from Searches for Transient Neutrino Sources (IceCube Collaboration, Homeier et al.), Gamma-Ray Bursts (GRB 2012), Munich, Germany POS 135.

Search for Ultra–High-Energy Tau Neutrinos in IceCube (IceCube Collaboration, Williams et al.), Proc. of the 12th Intl. Workshop on Tau Lepton Physics (TAU 2012), Nagoya, Japan, Nucl. Phys. B **253** 155 (2014).

Neutrinos Searches with the IceCube Telescope (IceCube Collaboration, Aguilar et al.), Proc. of the 9th Workshop on Science with the New Generation of High-Energy Gamma-Ray Experiments, Lecce, Italy (SciNeGHE 2012), Nucl. Phys. B **239** 184 (2013).

Search for Secluded Dark Matter in the Sun Using the IceCube Neutrino Observatory (IceCube Collaboration, Miller et al.), 9th Intl. Conf. on Identification of Dark Matter (IDM 2012), Chicago, Illinois (2012); kicp-workshops.uchicago.edu/IDM2012/ presentations.php #65

Search for Dark Matter Captured in the Sun with the IceCube Neutrino Observatory (IceCube Collaboration, Danninger et al.), IDM 2012; kicp-workshops.uchicago.edu/ IDM2012/presentations.php #25

Latest Results from IceCube (IceCube Collaboration, Rott et al.), IDM 2012; kicp-workshops.uchicago.edu/ IDM2012/presentations.php #80

Latest Results on Searches for Dark Matter from IceCube (IceCube Collaboration, Danninger et al.), 36th Intl. Conf. on High-Energy Physics, Melbourne, Australia (2012); indico.cern.ch/ confAuthorIndex.py?view=full&letter=d&confId=181298

Atmospheric-Neutrino Oscillation Physics with IceCube (IceCube Collaboration, Wiebusch et al.), European Strategy for Neutrino Oscillation Physics II, CERN, Switzerland (2012); indico.cern.ch/conferenceOtherViews.py?view=standard& confId=176696(Mon. poster session).

Indirect Dark Matter Searches with IceCube (IceCube Collaboration, Strahler et al.), 47th Rencontres de Moriond - Cosmology, La Thiule, Italy (2012); moriond.in2p3.fr/Proceedings/2012/Moriond_Cosmo_2012.pdf p. 301.

Cosmic-Ray Physics with the IceCube Observatory (IceCube Collaboration, Kolanoski et al.), Proc. of 23rd European Cosmic Ray Symposium and 32nd Cosmic Ray Conf., Moscow, Russia (ECRS 2012), JPCS **409** 012006 (2013); astro-ph.HE/12095610.

Neutrino Astronomy with the IceCube Observatory (IceCube Collaboration, Kappes et al.), Proc. of ECRS 2012, JPCS **409** 012014 (2013); astro-ph.HE/12095855.

The Latest νs from IceCube (IceCube Collaboration, Taboada et al.), Proc. of the 5th Intl. Mtg. on High-Energy Gamma-Ray Astronomy, Heidelberg, Germany (GAMMA2012), AIP Conf. Proc. **1505** 209.

Measurement of Anisotropy in the Arrival Direction Distribution of PeV Cosmic Rays with IceTop (IceCube Collaboration, Westerhoff et al.), Proc. of GAMMA2012, AIP Conf. Proc. **1505** 454.

Cosmic-Ray Spectrum and Composition with the IceCube Observatory (IceCube Collaboration, Tamburro et al.), Proc. of the Thirteenth Marcel Grossman Meeting (MG13), Stockholm, Sweden (2012), Int. J. Mod. Phys. D **22** 1033 (2013); astro-ph.HE/12107526.

Searches for Neutrinos from GRBs with IceCube (IceCube Collaboration, Finley et al.), MG13, Stockholm, Sweden.

Recent Results from the IceCube Neutrino Observatory (IceCube Collaboration, Hoffman et al.), Intl. Conf. on New Frontiers in Physics, Kolymbari, Crete (2012); indico.cern.ch/conferenceTimeTable.py?confId=176361#20120614.detailed (Thurs. PM)

Searching for Neutrinos from Dark Matter Annihilation in the Earth with the IceCube Detector (IceCube Collaboration, Kunnen et al.), DarkAttack2012, Ascona, Switzerland; itp.uzh.ch/events/darkattack/programme.html Thurs. 17:20

Indirect Detection with Neutrinos, DarkAttack2012, Ascona, Switzerland; itp.uzh.ch/events/darkattack/programme.html Thurs 11:00.

Neutrino Astronomy, 11th Intl. Conf. on Nucleus-Nucleus Collisions, San Antonio, Texas (2012), nn2012.tamu.edu/index.php/m-public-lecture-v1.html

Measurement of the Cosmic-Ray Spectrum and Average Mass with IceCube (IceCube Collaboration, Hussain et al.), 39th Scientific Assembly of the Committee on Space Research (COSPAR 2012), Mysore, India.

IceCube/DeepCore and IceCube/PINGU: Prospects for few-GeV scale neutrino physics in the ice (IceCube Collaboration, Cowen et al.), Intl. Workshop on Neutrino Factories, Super Beams and Beta Beams, Williamsburg, Virginia (NuFact 2012).

Detection of Cascades Induced by Atmospheric Neutrinos in the 79-String IceCube Detector (IceCube Collaboration, Ha et al.), Proc. of 11th Conf. on the Intersections of Particle and

Nuclear Physics (CIPANP 2012), St. Petersburg, Russia, AIP **1560** 347 (2013); hep-ex/12090698.

Supernova Neutrino Detection with IceCube: Overview and overlook (IceCube Collaboration, Riedel et al.), Institute for Nuclear Theory INT-12-12a Core-Collapse, Seattle, Washington (2012).

Prospects for a Radio Air-Shower Detector at South Pole (IceCube and ARA collaborations, Böser et al.), Proc. of the 5th Intl. Workshop on Acoustic and Radio EeV Neutrino detection Activities (ARENA 2012), Erlangen, Germany, AIP **1535** 116 (2013); astro-ph.IM/12110026.

First Results on Angular Response and Efficiency of Acoustic Sensors of the South Pole Acoustic Test Setup (IceCube Collaboration, Berdermann et al.), Proc. of ARENA 2012, AIP **1535** 180 (2013).

Observation of PeV Neutrinos in IceCube (IceCube Collaboration, Whitehorn et al.), TeV Particle Astrophysics (TeVPA 2012), Mumbai, India.

Results from IceCube (IceCube Collaboration, Gaisser et al.), TeV Particle Astrophysics (TeVPA 2012), Mumbai, India.

Cosmic-Ray Results from IceCube / IceTop (IceCube Collaboration, Gaisser et al.), TeV Particle Astrophysics (TeVPA 2012), Mumbai, India.

IceCube/DeepCore and IceCube/PINGU: Prospects for Few-GeV–Scale ν Physics in the Ice (IceCube & PINGU collaborations, Clark et al.), Proc. of 10th Intl. Conf. on Beauty, Charm & Hyperons in Hadronic Interactions (BEACH 2012), Wichita, Kansas, Nucl. Phys. B **233** 223.

Neutrino Astronomy: An Update, Proc. of Intl. Astronomical Union Symposium 288: *Astrophysics in Antarctica*, XXVIII General Assembly, Beijing, China (2012), **8** 84 (2013).

The IceCube Neutrino Telescope (IceCube Collaboration, Gaisser et al.), Proc. of IAU Symposium 288: XXVIII General Assembly, Beijing, China (2012), **8** 105 (2013).

Supernova ν Detection and Low-Energy Potential of IceCube (IceCube Collaboration, Bruijn et al.), Proc. of Neutrino Oscillation Workshop (NOW 2012), Conca Specchiulla, Italy, Nucl. Phys. B **237** 94 (2013); astro-ph.IM/13022040.

Neutrino Astronomy with IceCube (IceCube Collaboration, Aguilar et al.), Proc. of NOW 2012, Nucl. Phys. B **237** 250 (2013); astro-ph.HE/13016504.

Atmospheric Neutrino Oscillations in IceCube (IceCube Collaboration, Groβ et al.), Proc. of NOW 2012, Nucl. Phys. B **237** 272 (2013); hep-ex/13014339.

A View of Prompt Atmospheric Neutrinos with IceCube (IceCube Collaboration, Schukraft et al.), Proc. of NOW 2012, Nucl. Phys. B **237** 266 (2013); astro-ph.HE/ 13020127.

IceCube: From Oscillations to PeV Neutrino Events, NOW 2012, Nucl. Phys. B **237** 211 (2013).

Neutrino Astronomy: An Update, Proc. of 100 Years of Cosmic Rays, Bad Saarow, Germany (2012), Astropart. Phys. **53** 166 (2014).

IceCube and Friends (IceCube Collaboration, DuVernois et al.), PACIFIC 2012, Moorea, French Polynesia.

Recent Results from IceCube (IceCube Collaboration, Odrowski et al.), Proc. of 42nd Intl. Symposium on Multiparticle Dynamics (ISMD 2012), Kielce, Poland, Acta Physica Polonica B **6** 687 (2013).

Neutrinos from Astrophysical Sources (with I. Saba & J. Tjus), Proc. of ISMD 2012, Kielce, Poland, Acta Physica Polonica B **6** 681 (2013); astro-ph.HE/13021015.

Observation of PeV Neutrinos in IceCube (IceCube Collaboration, Whitehorn et al.), 13th Annual Intl. Workshop on Next-Generation Nucleon Decay & Neutrino Detectors (NNN12), Fermilab, Batavia, Illinois (2012).

IceCube-DeepCore-PINGU (IceCube Collaboration, Koskinen et al.), NNN12, Fermilab (2012).

Results of the Extraterrestrial and Atmospheric Neutrino-Induced Cascade Searches with IceCube (IceCube Collaboration, M. Lesiak-Bzdak et al.), MIAMI 2012, Ft. Lauderdale, FL.

Searches for Astrophysical High-Energy Neutrinos with IceCube (IceCube Collaboration, Woschnagg et al.), MIAMI 2012, Ft. Lauderdale, Florida.

Neutrino and Dark Matter Physics with IceCube DeepCore (IceCube Collaboration, DeYoung et al.), MIAMI 2012, Ft. Lauderdale, Florida.

Neutrino Radiography of the Earth with the IceCube Neutrino Observatory (IceCube Collaboration, Hoshina et al.), Am. Geophysical Union Fall Mtg., San Francisco, CA (2012).

IceCube Neutrinos: From Oscillations to PeV-Energy Events, Proc. of 26th Texas Symposium on Relativistic Astrophysics, São Paulo, Brazil (2012), Brazilian J. of Phys. **43** 5 308 (2013).

IceCube Neutrinos: From GeV to PeV, Proc. of 9th Intl. Symposium on Cosmology and Particle Astrophysics, Taipei, Taiwan (COSPA 2012), Nucl. Phys. B **246** 3 (2014).

Neutrinos: Report of Community Summer Study 2013, Snowmass (with Intensity Frontier nu Working Group collaboration *et al*), FERMILAB-CONF-13-479-E; hep-ex/13104340.

Oscillations on Ice (IceCube Collaboration, DeYoung et al.), Workshop on Exotic Physics with Neutrino Telescopes, Marseille, France (EPNT 2013).

Search for Relativistic Magnetic Monopoles with the IceCube Neutrino Telescope (IceCube Collaboration, Posselt et al.), Workshop on Exotic Physics with Neutrino Telescopes, Marseille, France (EPNT 2013).

Direct Detection of Supersymmetric Particles with IceCube (IceCube Collaboration, D. Soldin et al.), (EPNT 2013).

Searches for GUT Magnetic Monopoles with the IceCube Detector (IceCube Collaboration, Benabderrahmane et al.), EPNT 2013.

Search for Secluded Dark Matter in the Sun with IceCube (IceCube Collaboration, Jonathan Miller et al.), EPNT 2013.

Ground-Level Enhancement of May 17, 2012 Observed at South Pole (IceCube Collaboration, Evenson et al, with J.W. Beiber et al.), Am. Geophysical Union Spring Meeting of the Americas, Cancun, Mexico.

IceCube GRB Searches: Toward a Realtime Search System (IceCube Collaboration, Blaufuss et al.), Realtime Astroparticle Physics Workshop, Bonn, Germany (2013).

IceCube Optical Follow-Up (IceCube Collaboration, Voge et al.), Realtime Astroparticle Physics Workshop (2013); indico.cern.ch/contributionListDisplay.py?confId=222288

PINGU – Resolving the Neutrino Mass Hierarchy at the South Pole (IceCube Collaboration, Koskinen et al.), New Directions in Neutrino Physics, Aspen Colorado (2013); indico.cern.ch/ conferenceDisplay.py?confId=224351 Thurs. 8:45.

Observation of PeV Neutrinos in IceCube (IceCube Collaboration, C. Kopper et al.), Lake Louise Winter Institute 2013, Alberta, Canada; indico.triumf.ca/contribution Display.py?contribId=58&sessionId=8&confId=1568

Diffuse and Prompt Neutrinos in IceCube (IceCube Collaboration, Schukraft et al.), Results and Prospects of Forward Physics at the LHC, CERN, Geneva, Switzerland (2013); indico.cern.ch/conferenceOtherViews.py?view=standard&confId=223562 Tu CR 14:30.

Neutrino Radiography of the Earth: IceCube and Hyper Kamiokande (IceCube Collaboration, Hoshino et al, with H.K.M. Tanaka & A. Taketa), Neutrino GeoScience 2013, Takayama, Japan; awa.tohoku.ac.jp/geoscience2013/?page_id=269

IceCube Results (IceCube Collaboration, Ahlers et al.), Rencontres de Moriond: *Very-High-Energy Phenomena in the Universe*, La Thiule, Italy (2013); moriond.in2p3.fr/ Proceedings/2013/Moriond_VHEPU_2013.pdf, p. 245.

Search for Extremely-High-Energy Cosmogenic Neutrinos with the IceCube Detector (IceCube Collaboration, Mase et al.), Rencontres de Moriond (2013); moriond.in2p3.fr/ Proceedings/2013/ Moriond_VHEPU_2013.pdf, p. 261.

Search for Neutrino Flares from Active Galactic Nuclei with the IceCube Detector (IceCube Collaboration, Cruz et al.), Rencontres de Moriond (2013); moriond.in2p3.fr/ Proceedings/2013/Moriond_VHEPU_2013.pdf, p. 269.

Recent Highlights from IceCube (IceCube Collaboration, Whitehorn et al.), XLVIIIth Rencontres de Moriond: *Electroweak Interactions and Unified Theories*, La Thiule, Italy (2013); moriond.in2p3.fr/Proceedings/2013/Moriond_EW_2013.pdf, p.159.

Neutrinos from Heaven and Hell in IceCube (IceCube Collaboration, Yáñez et al.), Proc. of 48th Rencontres de Moriond: Electroweak Interactions and Unified Theories, 399, La Thuile, Aosta Valley, Italy (2013).

WIMP Annihilations in the Sun (IceCube Collaboration, Rameez et al.), Proc. of 48th Rencontres de Moriond: Electroweak Interactions and Unified Theories, 559 (2013).

Interpretation of Current IceCube Results on Galactic and Extragalactic Source Searches (IceCube Collaboration, Aguilar et al.), XV Intl. Workshop on Neutrino Telescopes (NuTel 2013), Venice, Italy, PoS Session XIII; pos.sissa.it/cgi-bin/ reader/conf.cgi?confid=196

PINGU: The Precision IceCube Next Generation Upgrade (IceCube-PINGU collaboration, Kowalski et al.), NuTel 2013, Venice, Italy, PoS 056 (2013).

IceCube – Status and Recent Results (IceCube Collaboration, Karle et al.), NuTel 2013, Venice, Italy; astro-ph.HE/14014496 (2014).

Latest Results on Searches for Dark Matter from IceCube (IceCube Collaboration, Danninger et al.), IceCube Particle Astrophysics Symposium, Madison, Wisconsin (IPA 2013).

Study of TeV-PeV Cosmic-Ray Anisotropy with the IceCube, IceTop and AMANDA Detectors (IceCube Collaboration, Santander et al.), IPA 2013.

Observation of Very-High-Energy Neutrinos in IceCube (IceCube Collaboration, C. Kopper et al.), IPA 2013.

Spatial Clustering Analysis of the Very-High-Energy Neutrinos in IceCube (IceCube Collaboration, Kurahashi Neilson et al.), IPA 2013.

Results from IceCube (IceCube Collaboration, Whitehorn et al.), IPA 2013.

Search for Astrophysical Neutrinos with IceCube (IceCube Collaboration, Mase et al.), 25th Rencontres de Blois, *Particle Physics and Cosmology*, Blois, France; indico.cern.ch/ contributionDisplay.py?contribId=67&sessionId=15&confId=223704

Results from the IceCube Neutrino Observatory IceTop (IceCube Collaboration, Zarzhitsky et al.), XXI Intl. Workshop on High Energy Physics and Quantum Field Theory; qfthep.sinp.msu.ru/talks2013/IceCubeResults_QFTHEP.pdf

Cosmic-Ray Spectrum, Composition and Anisotropy Measured with IceCube / IceTop (IceCube Collaboration, Tamburro et al.), Proc. of Roma Intl. Conf. on AstroParticle Physics (RICAP-13), Rome, Italy, Nucl. Instrum. Meth. A **742** 35 (2014); astro-ph.HE/13078394.

Study of TeV-PeV Cosmic-Ray Anisotropy with IceCube, IceTop and AMANDA Detectors (IceCube Collaboration, Desiati et al.), Proc. of RICAP-13, NIMA **742** 199 (2014); astro-ph.HE/13080246.

Neutrino Astrophysics with IceCube (IceCube Collaboration, Taboada et al.), Proc. of RICAP-13, NIMA **742** 77 (2014).

Neutrino Mass Hierarchy Measurement with PINGU (IceCube/PINGU collaborations, Clark et al.), XVth Intl. Workshop on Neutrino Factories, Super Beams and Beta Beams (NuFact 2013), Beijing, China.

News from IceCube (IceCube Collaboration, Kurahashi Neilson et al.), Phenomonology 2013 Symposium (PHENO 2013), Pittsburgh, Pennsylvania; indico.cern.ch/contribution Display.py?sessionId=5&contribId=198&confId=221653

Results from IceCube (IceCube Collaboration, Ha et al.), SLAC Summer Institute, Stanford, CA (2013); indico.cern.ch/getFile.py/access?contribId=82&sessionId= 7&resId=0&materialId=slides& confId=240480.

Cosmic Rays and Neutrinos (IceCube Collaboration, Resconi et al.), Proc. of the European Physical Society Conference on High Energy Physics (EPS-HEP 2013), Stockholm, Sweden, PoS 151 (2013).

Latest Results on Searches for Dark Matter from IceCube (IceCube Collaboration, Danninger et al.), Proc. of EPS-HEP 2013, Stockholm, Sweden, PoS 395 (2013).

Recent Developments in Neutrino Astronomy in Ice and Water (IceCube Collaboration, C. Kopper et al.), Proc. of EPS-HEP 2013, Stockholm, Sweden, PoS 401 (2013).

Recent IceCube Results on High Energy Neutrinos and Dark Matter (IceCube Collaboration, Bai et al.), VII Intl. Conf. on Interconnections between Particle Physics and Cosmology (PPC2013), Deadwood, SD; dsu.edu/research/ppc2013/talks/2013/Talk-68-Xinhua.pdf

IceCube: Neutrino Physics from GeV-PeV (IceCube Collaboration, Halzen et al.), Proc. of Snowmass 2013, SNOW13-00117; astro-ph.HE/13083171.

Multi-messenger Tests of the IceCube Excess (IceCube Collaboration, Ahlers et al.), TeV Particle Astrophysics (TeVPA 2013), Irvine, CA; indico.cern.ch/event/221841/ session/6/ contribution/96

Searches for Point and Extended Sources of Neutrinos with the IceCube Detector (IceCube Collaboration, Feintzeig et al.), TeVPA 2013; indico.cern.ch/event/ 221841/session/9/ contribution/99

Probing Cosmic-Ray Origin with the Cosmogenic Neutrino Searches with IceCube (IceCube Collaboration, Ishihara et al.), TeVPA 2013; indico.cern.ch/event/ 221841/session/10/ contribution/34

Results from IceCube (IceCube Collaboration, Karle et al.), TeVPA 2013; indico.cern.ch/event/ 221841/session/2/contribution/0

Neutrino-Induced Cascades with IceCube (IceCube Collaboration, Kiryluk et al.), TeVPA 2013; indico.cern.ch/event/221841/session/9/contribution/113

Analysis of the High-Energy Starting Events in IceCube (IceCube Collaboration, C. Kopper et al.), TeVPA 2013; indico.cern.ch/event/221841/session/9/contribution/104

Search for Prompt Neutrino Emission from Gamma-Ray Bursts with IceCube (IceCube Collaboration, Richman et al.), TeVPA 2013; indico.cern.ch/event/221841/session/9/ contribution/101

Search for Correlation of High-Energy Starting Events in IceCube with GRBs (IceCube Collaboration, Taboada et al.), TeVPA 2013; indico.cern.ch/event/221841/session/9/ contribution/102

PeV Cosmic Rays Measured by IceCube / IceTop (IceCube Collaboration, Tilav et al.), TeVPA 2013; indico.cern.ch/event/221841/session/4/contribution/56

What Can We Learn about the Ultra–High-Energy Cosmic-Ray Origin from the Present Results by the IceCube Neutrino Observatory? (IceCube Collaboration, Yoshida et al.), TeVPA 2013; indico.cern.ch/event/221841/session/2/contribution/10

Implications of IceCube Astrophysical Neutrinos (IceCube Collaboration, Whitehorn et al.), Snowmass on the Mississippi, Minneapolis, Minnesota (CSS 2013); indico.fnal.gov/ contributionDisplay.py?contribId=182&sessionId=43&confId=6890

PINGU Mass Hierarchy Sensitivity (PINGU and IceCube collaborations, Cowen, Grant, DeYoung et al.), Snowmass on the Mississippi (CSS 2013); indico.fnal.gov/contribution Display.py?contribId=181&sessionId=43&confId=6890

Cosmic-Ray Anisotropy Studies at TeV and PeV Energies with AMANDA, IceCube & IceTop (IceCube Collaboration, Santander et al.), Cosmic Ray Anistotropy Workshop 2013, Madison, Wisconsin; events.icecube.wisc.edu/contributionDisplay.py?contribId=31& sessionId=4 &confId=48

Astrophysical Neutrino Searches with the IceCube Neutrino Observatory (IceCube Collaboration, Ishihara et al.), 12th Asia Pacific Physics Conf. / Asia-Europe Physics Summit, Chiba, Japan.

The Precision IceCube Next-Generation Upgrade (IceCube / PINGU collaboration, Williams et al.), APS Division of Particles and Fields, Santa Cruz, CA; astro-ph.IM/ 13101287.

IceCube: the Discovery of High-Energy Cosmic Neutrinos (with M. Ahlers), 6th Intl. Conf. on Acoustic and Radio EeV Neutrino Detection Activities, Annapolis, MD (2014).

Recent Highlights from IceCube (IceCube Collaboration, Kappes et al.), Proc. of 7th Very Large Volume Neutrino Telescope Workshop (VLVnT13), Stockholm, Sweden, AIP **1630** 7 (2014).

Neutrino Oscillations with IceCube, DeepCore and PINGU (IceCube-PINGU collaboration, DeYoung et al.), Proc. of VLVnT13, AIP **1630** 32 (2014).

Results from IceCube Contained Event Search (IceCube Collaboration, Whitehorn et al.), VLVnT13; agenda.albanova.se/contributionDisplay.py? contribId=352&sessionId= 252&confId=3930

Observation of High-Energy Neutrinos with IceCube (IceCube Collaboration, DeYoung et al.), VLVnT13; agenda.albanova.se/contributionDisplay.py?contribId=352&sessionId=252& confId=3930

Search for a Small-Scale Anisotropy with 3 Years of the IceCube Detector (IceCube Collaboration, Bernhard et al.), Proc. of VLVnT13, AIP Conf. Proc. **1630** 70 (2014).

Low-Energy Neutrino Search for Dark Matter in the Galactic Center with IceCube-DeepCore (IceCube Collaboration, Flis et al.), Proc. of VLVnT13, AIP Conf. Proc. **1630** 89 (2014).

Light Propagation in the South Pole Ice (IceCube Collaboration, Williams et al.), Proc. of VLVnT13, AIP Conf. Proc. **1630** 146 (2014).

PINGU Sensitivity to Neutrino Mass Hierarchy (IceCube PINGU collaboration, Groβ et al.), Proc. of VLVnT13, AIP Conf. Proc. **1630** 82 (2014).

IceVeto: Extended PeV Neutrino Astronomy in the Southern Hemisphere with IceCube (IceCube Collaboration, Auffenberg et al.), Proc. of VLVnT13, AIP Conf. Proc. **1630** 50 (2014).

Event Triggering in the IceCube Data Acquisition System (IceCube Collaboration, Kelley et al.), Proc. of VLVnT13, AIP Conf. Proc. **1630** 154 (2014).

The IceCube Data Acquisition System for Galactic Core Collapse Supernova Searches (IceCube Collaboration, Baum et al.), VLVnT13, AIP Conf. Proc. **1630** 150 (2014).

Digital Optical Module Design for PINGU (IceCube-PINGU collaboration, Sandstrom et al.), Proc. of VLVnT13, AIP Conf. Proc. **1630** 180 (2014).

A First Calibration Study for PINGU at DESY (IceCube-PINGU collaboration, Shanidze et al.), Proc. of VLVnT13, AIP Conf. Proc. **1630** 142 (2014).

Development of a Multi-PMT Optical Module Prototype for PINGU (IceCube-PINGU collaboration, Classen et al.), Proc. of VLVnT13, AIP Conf. Proc. **1630** 176 (2014).

Neutrino Astrophysics (IceCube Collaboration, Kiryluk et al.), XXXIII Intl Symposium on Physics in Collision, Beijing, China (2013); indico.ihep.ac.cn/contributionDisplay.py?contribId=16&sessionId=5&confId=2989

The PeV Neutrino Sky Seen by IceCube (IceCube Collaboration, Schukraft et al.), Anisotropic Universe Workshop, Amsterdam, Netherlands; grappa.science.uva.nl/ anisotropies/program.html last talk, Day 1

Determining the Neutrino Mass Hierarchy with PINGU (IceCube Collaboration, Kappes et al.), XXIV Workshop on Weak Interactions and Neutrinos (WIN 2013) Natal, Brazil; indico.cern.ch/contributionDisplay.py?contribId= 50&sessionId=3&confId=234536

Measurement of Muon Neutrino Disappearance with the Completed IceCube Detector (IceCube Collaboration, Yáñez et al.), WIN 2013, Natal, Brazil; indico.cern.ch/contribution Display.py?contribId=71&sessionId=1&confId=234536

Measuring the Cosmic Ray Energy Spectrum and Composition with IceCube (IceCube Collaboration, Ruzybayev et al.), Proc. of 13th Intl. Conf. on Topics in Astroparticle and Underground Physics (TAUP 2013), Asilomar, CA, Phys. Procedia **61** 443 (2015)

Search for Diffuse Astrophysical Muon Neutrinos with Two Years of IceCube Data (IceCube Collaboration, Weaver et al.), TAUP 2013; conferences.lbl.gov/getFile.py/access?contribId=166&sessionId=21&resId=0&materialId=slides&confId=36.

First Evidence of High-Energy Extraterrestrial Neutrinos at IceCube (IceCube Collaboration, C. Kopper et al.), TAUP 2013; conferences.lbl.gov/getFile.py/access? contribId=143&sessionId=26&resId=0&materialId=slides&confId=36

Probing Extraterrestrial Neutrino Fluxes and Atmospheric Charm with Contained Neutrino Events above 1 TeV in IceCube (IceCube Collaboration, van Santen et al.), Proc. of TAUP 2013, Phys. Procedia **61** 633 (2015)

Measurement of the Diffuse Neutrino Flux by a Global Fit to Multiple IceCube Results (IceCube Collaboration, Mohrmann et al.), TAUP 2013, Phys. Procedia **61** (2015)

Latest Results on Searches for Dark Matter from IceCube (IceCube Collaboration, Danninger et al.), TAUP 2013; conferences.lbl.gov/getFile.py/access?contribId= 213&sessionId=43&resId=0& materialId=slides&confId=36

Measurement of Atmospheric Neutrino Oscillations with IceCube / DeepCore in its 79-String Configuration (IceCube Collaboration, Euler et al.), Proc. of TAUP 2013, Phys. Procedia **61** 598 (2015)

Measurement of the Muon Content of Air Showers with IceTop (IceCube Collaboration, Gonzalez et al.), TAUP 2013; conferences.lbl.gov/getFile.py/access?contribId=80&sessionId= 42&resId=0&materialId=slides&confId=36

Neutrino Astronomy with IceCube (IceCube Collaboration, Sánchez et al.), Cosmic-Rays Acceleration, Sources and Propagation: A Rendezvous (CASPAR 2013), DESY, Hamburg, Germany; indico.desy.de/contributionDisplay.py?contribId=28& confId=7169

The IceCube Neutrino Telescope (IceCube Collaboration, Rott et al.), 2013 IEEE Nuclear Science Symposium, Seoul, Korea.

The Optical and X-Ray Follow-Up Program of IceCube (IceCube Collaboration, Stasik et al.), Astrophysical Multimessenger Observatory Network (AMON 13), University Park, PA (2013).

The IceProd (IceCube Production) Framework (IceCube Collaboration, Díaz-Vélez et al.), Proc. of 20th Intl. Conf. on Computing in High-Energy and Nuclear Physics (CHEP2013), Amsterdam, Netherlands, JPCS **513** 032026 (2014).

The IceCube Neutrino Observatory DAQ and Online System (IceCube Collaboration, Hanson et al.), CHEP2013; indico.cern.ch/contributionListDisplay.py?confId=214784& contribId=390

Monte Carlo Simulations of the IceCube Detector with GPUs (IceCube Collaboration, C. Kopper et al.), CHEP2013; indico.cern.ch/contributionList Display.py?confId=214784& contribId=353

Evidence of Extraterrestrial High-Energy Neutrinos from IceCube (IceCube Collaboration, de los Heros et al.), Centro Nacional de Física de Partículas, Astropartículas y Nuclear (CPAN 2013), Sevilla, Spain; indico.ific.uv.es/ indico/contributionDisplay.py?contribId=8&sessionId=5& confId=764

Highlights and Plans of IceCube (IceCube Collaboration, Rott et al.), 19th Intl. Symposium on Particles, Strings and Cosmology, Taipei, Taiwan (PASCOS 2013); indico.cern.ch/getFile.py/ access?contribId=40&sessionId=22&resId=0&materialId= slides&confId=282414.

IceCube and PINGU (IceCube Collaboration, Groβ et al.), 14th Intl. Workshop on Next-generation Nucleon decay and Neutrino detectors, Kashiwa, Japan; indico.ipmu.jp/ indico/ contributionDisplay.py?sessionId=4&contribId=61&confId=17

The Highest-Energy Neutrinos: First Evidence for Cosmic Origin, Proc. of Pontecorvo100 – *Symposium in honour of the 100th Anniversary of Bruno Pontecorvo's Birth*, Pisa, Italy, Nuovo Cim. C **37** 3 83 (2014), Astron. Nachr. **335** 507 (2014); hep-ph/13116350.

The Birth of Neutrino Astronomy (IceCube Collaboration, Kurahashi et al.), Proc. of the 10th Intl. Symposium on Cosmology and Particle Astrophysics (CosPA2013), Honolulu, Hawaii, SLAC econf/C131112 (2013); astro-ph.HE/14023627.

CosPA2013: Outlook, Proc. of CosPA2013, SLAC econf/C131112; astro-ph.HE/ 14027302.

Atmospheric Neutrino Oscillations with PINGU (IceCube-PINGU collaboration, Odrowski et al.), Proc. of Topical Research Meeting on Prospects in Neutrino Physics (NuPhys2013), London, UK; J. Phys. Conf. Ser. **598** 012026 (2015).

IceCube: Results and Status (IceCube Collaboration, Fazely et al.), Miami 2013, Ft. Lauderdale, Florida (2013).

High Energy Neutrino Astronomy in the LHC Era (IceCube Collaboration, Kiryluk et al.), 5th Intl. Workshop, High Energy Physics in the LHC Era, Valparaíso, Chile (2013); indico.cern.ch/ event/252857/contribution/355

Recent Results from IceCube (IceCube Collaboration, Adams et al.), Spaatind 2014 – Nordic Conference on Particle Physics, Skeikampen, Norway; indico.hep.lu.se// contributionDisplay.py?contribId=24&sessionId=4&confId=1361

Results from Low-Energy Neutrino Searches for Dark Matter in the Galactic Center with IceCube-DeepCore (IceCube Collaboration, Flis et al.), Spaatind 2014; indico.hep.lu.se//getFile.py/access?contribId=26&sessionId=4&resId=0& materialId=slides& confId=1361

IceCube, Lake Louise Winter Institute, Canada (2014); indico.triumf.ca/getFile.py/access? contribId=9&sessionId=8&resId=0&materialId=slides&confId=1756

The Latest IceCube Results (IceCube Collaboration, Mase et al.), Proc. of the 8th Intl. Workshop on Ring Imaging Cherenkov Detectors (RICH 2013), Hayama, Kanagawa, Japan; Nucl. Instrum. & Meth. A **766** 43 (2014).

Recent Results from IceCube (IceCube Collaboration, Auffenberg et al.), XXVIIIth Rencontres de Physiques de la Vallée d'Aosta, *Results and Perspectives in Particle Physics*, La Thiule, Italy (2014); agenda.infn.it/conferenceOtherViews.py?confId=7102& view= standard Mon. 9:45.

Searches for Dark Matter and High-Energy Neutrinos with IceCube (IceCube Collaboration, C. Kopper et al.), Proc. of XLIXth Rencontres de Moriond, *Electroweak Interactions and Unified Theories*, La Thuile, Val d'Aosta, Italy; moriond.in2p3.fr/Proceedings/2014/ Moriond_ EW_2014.pdf p. 189.

Searches for Dark Matter and High Energy Neutrinos with the IceCube Detector (IceCube Collaboration, Vallecorsa et al.), Proc. of XLIXth Rencontres de Moriond, *Cosmology*, La Thiule, Val d'Aosta, Italy (2014); moriond.in2p3.fr/Proceedings/2014/ Moriond_ Cosmo_ 2014.pdf p.161.

Diffuse Neutrino Fluxes and GZK Neutrinos with IceCube (IceCube Collaboration, Ishihara et al.), Proc. of 7th Intl. Workshop on Very High Energy Particle Astronomy (VHEPA 2014), Kashiwa, Japan, JPS Conf. Proc.**15** 011008 (2017).

The Latest IceCube Results and the Implications (IceCube Collaboration, Mase et al.), Proc. of VHEPA 2014, Kashiwa, Japan, JPS Conf. Proc. **15** 011005 (2017).

Cosmic Neutrinos in IceCube (IceCube Collaboration, Kurahashi Neilson et al.), American Physical Society (APS) Spring Meeting, Savannah, Georgia (2014).

IceCube Results for Diffuse Muon Neutrinos (IceCube Collaboration, Weaver et al.), APS Spring Meeting, Savannah, Georgia (2014).

Measurement of the Cosmic Ray Energy Spectrum with IceCube (IceCube Collaboration, Ruzybayev et al.), APS Spring Meeting, Savannah, Georgia (2014).

The Track Engine – an FPGA Implementation of a Track-Finding Algorithm for the IceCube Neutrino Telescope (IceCube Collaboration, Wernhoff et al.), IEEE RealTime Conference, Nara, Japan (2014).

Dark Matter Searches with IceCube (IceCube Collaboration, Lünemann et al.), 26th Rencontres de Blois, Particle Physics and Cosmology, Blois, France (2014); blois.in2p3.fr/2014/ transparencies/WednesdayAfternoon/Astro_Cosmo/Luenemann.pdf

High Energy Cosmic Ray Anisotropy (IceCube Collaboration, Desiati et al.), Proc. of Vulcano Workshop 2014 – *Frontier Objects in Astrophysics and Particle Physics*, Vulcano, Italy; agenda.infn.it/getFile.py/access?contribId=42 &sessionId=9&resId=0& materialId=slides& confId=7266

Neutrino Observations with IceCube (IceCube Collaboration, Golup et al.), Proc. of Vulcano 2014, Frascati Phys. Ser. **58** 173 (2014).

Measuring the Neutrino Mass Hierarchy with Atmospheric Neutrinos (IceCube / PINGU collaborations, Cowen et al.), Fundamental Symmetries, Neutrinos, Neutrons and related Nuclear Astrophysics Long-Range Plan Town Meeting, Chicago, Illinois; physics.int-det/14095755.

Dark Matter Searches with IceCube / PINGU (IceCube Collaboration, de los Heros et al.), NORDITA Workshop on Latest Results on Dark Matter Searches, Stockholm, Sweden (2014).

Calibrating Photon Detection Efficiency in IceCube (IceCube Collaboration, Tosi et al.), Proc. of Technology and Instrumentation in Particle Physics (TIPP2014), Amsterdam, Netherlands, PoS 157; astro-ph.HE/150203102

Search for Partially Contained Neutrino-induced Particle Showers with IceCube (IceCube Collaboration, Stößl et al.), Astroparticle Physics 2014 (joint TeVPA / IDM conference), Amsterdam, Netherlands.

IceCube Dark Matter Searches Overview (IceCube Collaboration, Rott et al.), Astroparticle Physics 2014.

Conference Presentations and Proceedings

Search for Neutrinos from Dark Matter Annihilation in the Galactic Center with IceCube-79 (IceCube Collaboration, Bissok et al.), Astroparticle Physics 2014.

Searching for Annihilating Dark Matter in Nearby Galaxies and Galaxy Clusters with IceCube (IceCube Collaboration, de With et al.), Astroparticle Physics 2014.

Search for Dark Matter in the Centre of the Earth with the IceCube Neutrino Detector (IceCube Collaboration, Kunnen et al.), Astroparticle Physics 2014.

Latest Results on Searches for Point and Extended Sources with Time-integrated and Time-dependent Emissions of Neutrinos with the IceCube Neutrino Observatory (IceCube Collaboration, Christov et al.), Astroparticle Physics 2014.

Searches for Point Sources with Time-integrated and Small-scale Anisotropies in IceCube (IceCube Collaboration, Bernhard et al.), Astroparticle Physics 2014.

PINGU and the Neutrino Mass Hierarchy (IceCube/PINGU collaborations, Cowen et al.), Astroparticle Physics 2014.

Neutrino Astronomy Results from IceCube (IceCube Collaboration, Aguilar et al.), 5th Workshop on Air Shower Detection at High Altitude, Paris, France (2015).

Future Atmospheric Neutrino Measurements with PINGU (IceCube / PINGU collaborations, Grant et al.), Proc. of XXVI Intl. Conf. on Neutrino Physics and Astrophysics (Neutrino 2014), Boston, MA, AIP **1666** 090002 (2015).

Results from Atmospheric Neutrino Oscillations with IceCube / DeepCore (IceCube Collaboration, Yáñez et al.), Proc. of Neutrino 2014, AIP **1666** 100002 (2015).

First Detection of High-Energy Astrophysical Neutrinos with IceCube (IceCube Collaboration, Hill et al.), Proc. of Neutrino 2014, AIP **1666** 040001 (2015).

Search for Exotic Double-Track Signatures in IceCube (poster) (IceCube Collaboration, S.Kopper et al.), Neutrino 2014.

Calculating PINGU's Sensitivity to the Neutrino Mass Hierarchy (poster) (IceCube / PINGU collaboration, Schulte et al.), Neutrino 2014.

Event Reconstruction and Particle Identification for Low-Energy Events in DeepCore and PINGU (poster) (IceCube / PINGU collaborations, Arlen et al.), Neutrino 2014.

Search for Neutrinos from GRBs with IceCube (poster) (IceCube Collaboration, Hellauer et al.), Neutrino 2014.

Astrophysical Tau Neutrino Search with the IceCube Neutrino Observatory (poster) (IceCube Collaboration, Vraeghe et al.), Neutrino 2014.

Supernova Neutrinos in IceCube (poster) (IceCube Collaboration, Heereman et al.), Neutrino 2014.

Unfolding of the Muon Neutrino Energy Spectrum with IceCube (poster) (IceCube Collaboration, Schmitz et al.), Neutrino 2014.

New Calibration Methods for IceCube, DeepCore and PINGU (poster) (IceCube / PINGU collaboration, Jurkovič et al.), Neutrino 2014.

Neutrino Astronomy: Recent Results from IceCube (IceCube Collaboration, Rameez et al.), Electron Nucleus Scattering XII, Elba, Italy (2014).

Exploring the Universe with Very High Energy Neutrinos (IceCube Collaboration, Kappes et al.), Proc. of 37th Intl. Conf. on High Energy Physics (ICHEP 2014), Valencia, Spain, Nucl. Part. Phys. Proc. **273-275** (2016) 125.

PINGU and the Neutrino Mass Hierarchy (IceCube / PINGU collaboration, Clark et al.), Proc. of ICHEP 2014, Nucl. Part. Phys. Proc. **273-275** (2016) 1870.

Astrophysical Neutrinos with the IceCube Detector (IceCube Collaboration, Kiryluk et al.), ICHEP 2014; indico.ific.uv.es/indico/contributionDisplay.py?contribId=881& sessionId=28&confId=2025**.**

PINGU and IceCube Dark Matter Results (IceCube Collaboration, Rott et al.), Xth Rencontres du Vietnam Flavour Physics Conference, Quy Nhon, Vietnam (2014); vietnam.in2p3.fr/2014/ vhepu/transparencies/FridayMorning/Rott.pdf

Neutrino Flavor Physics with IceCube & PINGU (IceCube Collaboration, Ha et al.), Xth Rencontres du Vietnam Flavour Physics Conference (2014); vietnam.in2p3.fr/2014/ flavour/ThursdayAfternoon/Ha.pdf

Observation of High Energy Cosmic Ray Anisotropy with IceCube (IceCube Collaboration, Desiati et al.), 40th Scientific Assembly of the Committee on Space Research (COSPAR 2014), Moscow, Russia.

Cosmic Ray Studies with IceCube (IceCube Collaboration, Gonzalez et al.), 40th Scientific Assembly of the Committee on Space Research (COSPAR 2014), Moscow, Russia.

Recent Results from IceCube (IceCube Collaboration, Vandenbroucke et al.), 42nd SLAC Summer Institute, Stanford, California.

Neutrino Physics in the IceCube Subdetector, DeepCore (IceCube Collaboration, Day et al.), 3rd Intl. Conf. on New Frontiers in Physics, Kolymbari, Crete, Greece; indico.cern.ch/event/ 277650/session/4/contribution/404

Highlights from IceCube (IceCube Collaboration, Montaruli et al.), 3rd Intl. Conf. on New Frontiers in Physics, Kolymbari, Crete, Greece; indico.cern.ch/event/277650/session/3 /contribution/316/ material/slides/0.pdf

IceCube: The Discovery of High-Energy Cosmic Neutrinos (with M. Ahlers), Proc. of Frontiers of Fundamental Physics (FFP14), Marseille, France, PoS 029 (2014).

Composition from High p_τ Muons in IceCube (IceCube Collaboration, Soldin et al.), Proc. of 18th Intl. Symposium on Very High Energy Cosmic Ray Interactions (ISVHECRI 2014), CERN, Meyrin, Switzerland, EPJ Web Conf. **99** 06001 (2015); astro-ph.HE/1411.4448.

Probing the Transition from Atmospheric to Astrophysical Neutrinos in IceCube (IceCube Collaboration, Binder et al.), Proc. of ISVHECRI 2014, EPJ Web Conf. **99** 06002 (2015).

Measuring the Muon Content of Air Showers with IceTop (IceCube Collaboration, Gonzalez et al.), Proc. of ISVHECRI 2014, EPJ Web Conf. **99** 06002 (2015); astro-ph.HE/150103415.

High Energy Neutrinos in Astroparticle and Nuclear Physics (IceCube Collaboration, Hoffman et al.), 20th Particles and Nuclei Intl. Conf. (PANIC 2014), Hamburg, Germany.

Neutrino Physics with PINGU (IceCube Collaboration, Palczewski et al.), Proc. of PANIC 2014, Hamburg, Germany, p. 313.

Status of PINGU Measuring the NMH Using Atmospheric Neutrinos (IceCube / PINGU collaboration, Athayde Marcondes de André et al.), Proc. of XVIth Intl. Workshop on Neutrino Factories and Future Neutrino Facilities (NuFact 2014), Glasgow, UK, PoS 033 (2015).

Analysis Methods: The Muon Neutrino Spectrum Using IceCube (poster) (IceCube Collaboration, Börner et al.), 24th European Cosmic Ray Symposium (ECRS 2014), Kiel, Germany.

Observation of High-Energy Astrophysical Neutrinos with IceCube (IceCube Collaboration, Kelley et al.), Experimental Search for Quantum Gravity, Trieste, Italy (2014).

IceCube Results and PINGU Perspectives (IceCube / PINGU collaboration, Koskinen et al.), Proc. of Neutrino Oscillation Workshop (NOW 2014), Otranto, Lecce, Italy, Nucl. Part. Phys. Proc. **265-6** 215 (2015).

IceCube Searches for Neutrino Emission from Galactic and Extragalactic Sources (IceCube Collaboration, Palczewski et al.), XLIV Intl. Symposium on Multiparticle Dynamics (ISMD 2014), Bologna, Italy; EPJ Web Conf. **90** 03003 (2015).

Photon Propagation with GPUs in IceCube (IceCube Collaboration, Chirkin et al.), Proc. of GPU Computing in High Energy Physics, Pisa, Italy (2014); DOI:10.3204/DESY-PROC-2014-05 217 (2015).

Neutrino Astronomy and Astrophysics with IceCube (IceCube Collaboration, Seunarine et al.), Physics in Collision (PIC 2014), Bloomington, Indiana.

IceCube Neutrino Observatory – Cosmic PeV Neutrinos (IceCube Collaboration, Köpke et al.), The String Theory Universe, Mainz, Germany (2014).

Recent Results from IceCube Neutrino Observatory (IceCube Collaboration, Finley et al.), Roma Intl. Conf. on Astroparticle Physics (RICAP-14), Noto, Sicily, Italy (2014).

Analysis of the Cumulative Neutrino Flux from FERMI-LAT Blazar Populations Using 3 Years of IceCube Data (IceCube Collaboration, Glüsenkamp et al.), Proc. of RICAP-14, Noto, Sicily, Italy, EPJ Web of Conf. **121** 05006 (2016); astro-ph.HE/1502.03104.

Results from IceCube and the Prospects for PINGU (IceCube / PINGU collaboration, Koskinen et al.), Interplay between Particle and Astroparticle Physics, London, UK (2014).

Observation of Anisotropy in Cosmic-Ray Arrival Directions with the IceCube Observatory (IceCube Collaboration, McNally et al.), Proc. of UHECR2014, JPS Conf. Proc. **9** 010006 (2016).

Towards a Joint Analysis of Data from IceCube Neutrino Telescope, Pierre Auger Observatory and Telescope Array (IceCube/Auger/Telescope Array collaborations, Golup et al.), Proc. of UHECR2014, JPS Conf. Proc. **9** 010007 (2016).

Cosmic Ray Energy Spectrum and Composition from IceCube (IceCube Collaboration, Gonzalez et al.), UHECR2014, Springdale, Utah.

Report from the Multi-Messenger Working Group (IceCube Collaboration, Karg et al, with the Auger and Telescope Array collaborations), Proc. of UHECR2014, Springdale, Utah, JPS Conf. Proc. **9** 010021 (2016).

Atmospheric Neutrinos with IceCube, DeepCore and PINGU (IceCube Collaboration, DeYoung et al.), Neutrinos: Recent Development and Future Challenges (KITP UCSB), UC-Santa Barbara (2014).

High-Energy Neutrino Searches in IceCube and Their Results (IceCube Collaboration, C. Kopper et al.), Neutrinos: Recent Development and Future Challenges (2014).

IceCube: The Discovery of Cosmic Neutrinos, Neutrinos: Recent Development and Future Challenges (2014).

IceCube and the Discovery of High-Energy Cosmic Neutrinos, Multimessenger Astronomy in the Era of PeV Neutrinos, Annapolis, Maryland (2014).

Source Searches with IceCube in the Era of Diffuse Astrophysical Neutrinos (IceCube Collaboration, Kurahashi Neilson et al.), Multimessenger Astronomy in the Era of PeV Neutrinos (2014).

Astrophysical Neutrino Candidate Alerts from IceCube (IceCube Collaboration, Felde et al.), Multimessenger Astronomy in the Era of PeV Neutrinos (2014).

Constraints from IceCube's Follow-Up Program on the Nature of High-Energy Neutrino Sources (IceCube Collaboration, Strotjohann et al.), Multimessenger Astronomy in the Era of PeV Neutrinos (2014).

Search for Neutrinos from GRBs with IceCube (IceCube Collaboration, Hellauer et al.), Multimessenger Astronomy in the Era of PeV Neutrinos (2014).

Neutrino Oscillations and Dark Matter in IceCube (IceCube Collaboration, Day et al.), 4th Symposium on Prospects in the Physics of Discrete Symmetries (DISCRETE 2014), London, UK.

IceCube-Gen2 - High Energy Upgrade to IceCube (IceCube Collaboration, C. Kopper et al.), Detector Design and Technology for Next Generation Neutrino Observatories, Aachen, Germany (2014).

Neutrino Physics with IceCube and PINGU (IceCube Collaboration, Cowen et al.), Detector Design and Technology for Next Generation Neutrino Observatories, (2014).

IceCube Gen2 On-Ice Infrastructure (IceCube Collaboration, Hanson et al.), Detector Design and Technology for Next Generation Neutrino Observatories (2014).

DAQ IceCube (IceCube Collaboration, Kelley et al.), Detector Design and Technology for Next Generation Neutrino Observatories (2014).

Generation 2 Digital Optical Module (Gen2 DOM) (IceCube Collaboration, Sandstrom et al.), Detector Design and Technology for Next Generation Neutrino Observatories (2014).

IceCube, DeepCore, and Future Neutrino Observatories at the South Pole (IceCube Collaboration, Hanson et al.), Intl. Workshop on Next-Generation Nucleon Decay and Neutrino Detectors (NNN14), Paris, France (2014).

Future High-Energy Extensions of the IceCube Neutrino Observatory (IceCube Collaboration, Feintzeig et al.), Advances in Neutrino Technology (ANT 2014), Los Angeles, California.

High-Energy Neutrino Astronomy with IceCube (IceCube Collaboration, Hill et al.), 10th Conf. in the Symposium on Cosmology and Particle Astrophysics Series, Auckland, New Zealand (CosPA 2014).

Recent IceCube Results on Cosmic-Ray Physics (IceCube Collaboration, Kolanoski et al.), CosPA 2014.

Observation of the Cosmic-Ray Shadow of the Moon and Sun with IceCube (IceCube Collaboration, Bos et al.), Cosmic Ray Anisotropies, Bad Honnef, Germany (2015).

Anisotropy in Cosmic-Ray Arrival Directions Using IceCube and IceTop (IceCube Collaboration, McNally et al.), Cosmic Ray Anisotropies (2015).

High-Energy Astrophysical Neutrinos in IceCube (IceCube Collaboration, Aguilar et al.), Searching for the Sources of Galactic Cosmic Rays (SuGAR 2015), Geneva, Switzerland.

Recent Results from the IceCube Neutrino Observatory (IceCube Collaboration, Weaver et al.), Lake Louise Winter Institute, Alberta (2015).

IceCube-Gen2: Upgrading IceCube to Higher and Lower Energies (IceCube Collaboration, C. Kopper et al.), Lake Louise Winter Institute, Alberta (2015).

IceCube: Discovery of High-Energy Cosmic Neutrinos, Proc. of XVI Intl. Workshop on Neutrino Telescopes, (NeuTel 2015), Venice, Italy, PoS NEUTEL2015 003.

IceCube (IceCube Collaboration, Hultqvist et al.), Proc. of NeuTel 2015, PoS 053.

PINGU, Böser, Proc. of NeuTel 2015, PoS NEUTEL2015 056.

IceCube at the Threshold (IceCube Collaboration, Gaisser et al.), High-Altitude Water Cherenkov Observatory Inauguration, Puebla, Mexico (2014); astro-ph.HE/ 150707871.

IceProd2: A Next Generation Data Analysis Framework for the IceCube Neutrino Observatory (IceCube Collaboration, Schultz et al.), Proc. of 21st Intl. Conf. on Computing in High Energy and Nuclear Physics (CHEP2015), Okinawa, J. Phys. Conf. Ser. **664** 0620056.

Measurement of Muon Neutrino Disappearance with IceCube / DeepCore (IceCube Collaboration, Dunkman et al.), IceCube Particle Astrophysics Symposium 2015 (IPA 2015), Madison, Wisconsin; events.icecube.wisc.edu/contributionDisplay.py?contribId=112& sessionId= 49&confId=68

A Measurement of the Diffuse Astrophysical Muon Neutrino Flux Using Multiple Years of IceCube Data (IceCube Collaboration, Schoenen et al.), IPA 2015; events.icecube.wisc.edu/contributionDisplay.py?contribId=89&sessionId=42&confId=68.

Indirect Dark Matter Searches with IceCube (IceCube Collaboration, Grant et al.), 12th Conf. on the Intersections of Particle and Nuclear Physics (CIPANP 2015), Vail, Colorado.

Astrophysical Neutrinos with IceCube: Latest Results (IceCube Collaboration, Kiryluk et al.), CIPANP 2015.

IceCube Gen2, Solvay-Francqui Workshop on “Neutrinos: from Reactors to the Cosmos,” Brussels, Belgium (2015).

IceCube: The Discovery of High-Energy Cosmic Neutrinos, 27th Rencontres de Blois, Particle Physics and Cosmology, France (2015).

The Beginning of Extra-Galactic Neutrino Astronomy, Workshop on Weak Interactions and Neutrinos (WIN2015), Heidelberg, Germany.

Indirect Dark Matter Searches with the IceCube Neutrino Observatory (IceCube Collaboration, Wolf et al.), WIN2015.

Neutrino Mass Hierarchy with PINGU (IceCube Collaboration, Arlen et al.), WIN2015.

IceCube: The Discovery of High-Energy Cosmic Neutrinos, Proc. of 52nd Intl. School of Subnuclear Physics, ERICE (2015), Subnucl. Ser. **53** 247 (2017).

High-Energy Neutrinos in IceCube and Beyond (IceCube Collaboration, Palczewski et al.), in Proc. of 14th Marcel Grossman Mtg. on Recent Developments in Theoretical and Experimental General Relativity, Astrophysics, and Relativistic Field Theories (MG14), Rome Italy, 3251 (2017).

IceCube and the Discovery of High-Energy Cosmic Neutrinos, Proc. of MG14, 180 (2017).

The PINGU Detector (IceCube Collaboration, Ehrhardt et al.), European Physical Soc. Conf. on High Energy Physics (EPS-HEP 2015), Vienna, Austria, PoS EPS-HEP2015 068.

Neutrino Astrophysics (including Dark Matter Searches), PoS EPS-HEP2015 014.

Measurement of Atmospheric Neutrino Oscillations with the IceCube / DeepCore Detector (IceCube Collaboration, Vehring et al.), PoS EPS-HEP2015 419.

Methods for Detection of Astrophysical Tau Neutrinos in IceCube (IceCube Collaboration, Palczewski et al.), PoS EPS-HEP2015 405.

Status of Atmospheric Neutrino Oscillation Measurements in IceCube and PINGU (IceCube-Gen2 collaboration, Athayde Marcondes de André *et al*), XVII Int'l. Workshop on Neutrino Factories and Future Neutrino Facilities (NuFact 2015), Rio de Janeiro, Brazil
201508_jpamdandre_IceCube_PINGU_nufact_final.pdf

Correlation between the UHECRs Measured by the Pierre Auger Observatory & Telescope Array and Neutrino Candidate Events from IceCube (IceCube Collaboration, Christov et al*,* with Auger and Telescope Array collaborations), Proc. of Topics in Astroparticle and Underground Physics, Torino, Italy (TAUP 2015), J. Phys. Conf. Ser. **718** 052007 (2016).

Extremely High Energy Neutrinos in Six Years of IceCube Data (IceCube Collaboration, Ishihara et al.), Proc. of TAUP 2015, J. Phys. Conf. Ser. **718** 062027 (2016).

Measurement of the Muon Content of Air Showers with IceTop (IceCube Collaboration, Gonzalez et al.), Proc. of TAUP 2015, J. Phys. Conf. Ser. **718** 052017 (2016).

Cosmic-Ray Spectrum and Composition from Three Years of IceTop and IceCube (IceCube Collaboration, Rawlins et al.), Proc. of TAUP 2015, J.Phys. Conf. Ser. **718** 052033 (2016).

Characterization of the Astrophysical Neutrino Flux at the IceCube Neutrino Observatory (IceCube Collaboration, Mohrmann et al.), Proc. of TAUP 2015, J. Phys. Conf. Ser. **718** 062045 (2016).

Non-Standard Neutrino Interactions in IceCube (IceCube Collaboration, Day et al.), Proc. of TAUP 2015, J. Phys. Conf. Ser. **718** 062011 (2016).

Results & Prospects of IceCube's Real-Time Alert Capabilities (IceCube Collaboration, Kintscher et al.), Proc. of TAUP 2015, J. Phys. Conf. Ser. **718** 062029 (2016).

Status of the PINGU Detector (IceCube and PINGU collaborations, Söldner-Rembold et al.), TAUP 2015.

Latest Results on Atmospheric Neutrino Oscillations from IceCube / DeepCore (IceCube Collaboration, Athayde Marcondes de André et al.), Proc. of TAUP 2015, J. Phys. Conf. Ser. **718** 062001 (2016).

IceCube-Gen2 and Future Astronomy (IceCube Collaboration, Bai et al.), KIAA Workshop on Astroparticle Physics, Beijing, China (2015).

IceCube Simulation Production and the Transition to IceProd2 (IceCube Collaboration, Schultz et al.), Proc. of Very Large Volume Neutrino Telescope Workshop (VLVnT 2015), Rome, Italy, EPJ Web Conf. **116** 07003 (2016).

A Surface Array to Study Astrophysical Neutrinos with IceCube-Gen2 (IceCube-Gen2 collaboration, Gonzalez et al.), VLVnT 2015, Rome, Italy (2015).

From DeepCore to PINGU (IceCube-Gen2 collaboration, Yáñez et al.), Proc. of VLVnT 2015, EPJ Web Conf. **116** 11009 (2016).

A Precision Optical Calibration Module (POCAM) for IceCube-Gen2 (IceCube-Gen2 collaboration, Jurkovič et al.), Proc. of VLVnT 2015, EPJ Web Conf. **116** 06001 (2016).

Present and Future of the IceCube DAQ and Online Systems (IceCube-Gen2 collaboration, Hanson et al.), VLVnT 2015, Rome, Italy (2015).

IceCube Gen2: Toward a New Generation of Neutrino Detectors (IceCube-Gen2 collaboration, Hanson et al.), VLVnT 2015, Rome, Italy (2015).

Measuring the Optical Properties of IceCube Drill Holes (IceCube-Gen2 collaboration, Rongen et al.), Proc. of VLVnT 2015, EPJ Web Conf. **116** 06011 (2016).

Correlation between the UHECRs Measured by the Pierre Auger Observatory and Telescope Array and Neutrino Candidate Events from IceCube (IceCube Collaboration, Rameez et al*,* with Auger and Telescope Array collaborations), Proc. of VLVnT 2015, EPJ Web Conf. **116** 10004 (2016).

IceCube Results from Point-like Source Searches Using 6 yrs of Through-going Muon Data, Coenders et al.), Proc. of VLVnT 2015, EPJ Web Conf. 116 04003 (2016).

Capabilities of IceCube's Gamma-ray, Optical and X-ray Follow-up Programs (IceCube Collaboration, Kintscher et al.), VLVnT 2015, EPJ Web Conf. 116 10002 (2016).

Measurement of the Atmospheric Muon Neutrino Energy Spectrum with IceCube in the 79- and 86-String Configuration (IceCube Collaboration, Ruhe et al.), Proc. of VLVnT 2015, EPJ Web Conf. **116** 08004 (2016).

Application of Data Mining Algorithms in Atmospheric Neutrino Analyses with IceCube (IceCube Collaboration, Ruhe et al.), Proc. of VLVnT 2015, EPJ Web Conf. **116** 07006 (2016).

Results from IceCube (IceCube Collaboration, DeYoung et al.), Proc. of VLVnT 2015, EPJ Web Conf. **116** 11004 (2016).

Effect of Atmospheric Flux Uncertainties on the Determination of the Neutrino Mass Hierarchy (IceCube Gen2 collaboration, Sandroos et al.), Proc. of VLVnT 2015, EPJ Web Conf. **116** 08005 (2016).

Low-Energy Point-Source Searches with IceCube (IceCube Collaboration, Euler et al.), Proc. of VLVnT 2015, EPJ Web Conf. **116** 04004 (2016).

First Combined Search for Neutrino Point Sources in the Southern Sky with the ANTARES and IceCube Neutrino Telescopes (IceCube and ANTARES collaborations, Barrios-Martí et al.), Proc. of VLVnT 2015, EPJ Web Conf. **116** 04005 (2016).

Very–High-Energy Astrophysical Neutrinos with IceCube (IceCube Collaboration, Taboada et al.), Proc. of 4th Intl. Conf. on New Frontiers in Physics (ICNFP 2015), EPJ Web Conf. **126** 04047 (2016).

Cosmic-Ray Physics with TeV Muons in Large-Volume Detectors (IceCube Collaboration, Berghaus et al.), Proc. of Intl. Conf. on Particle Physics and Astrophysics (ICPPA 2015), Moscow, Russia, J. Phys. Conf. Ser. **675** 032032 (2016).

Neutrino Physics and Astrophysics with IceCube (IceCube Collaboration, Montaruli et al.), Proc. of Cosmic Ray Intl. Seminar (CRIS 2015), Gallipoli, Italy, Nucl. & Part. Phys. Proc. **279-281** 23 (2016).

Primary Spectrum & Composition with IceCube / IceTop (IceCube Collaboration, Gaisser et al.), Proc. of CRIS 2015, Nucl. & Part. Phys. Proc. **279-281** 47 (2016); astro-ph.HE/160106670

Enhanced Sensitivity to Astrophysical Neutrinos with a Surface Veto Array above IceCube (IceCube Collaboration, Tosi et al.), TeV Particle Astrophysics (TeVPA 2015), Kashiwa, Japan; crr.u-tokyo.ac.jp/indico/contributionDisplay.py?contribId=73& sessionId=6&confId=23.

Astrophysical Neutrinos in IceCube (IceCube Collaboration, van Santen et al.), TeVPA 2015, icrr.u-tokyo.ac.jp/indico/contributionDisplay.py?contribId=161&sessionId=6 &confId=23.

A Measurement of the Diffuse Astrophysical Muon Neutrino Flux Using 6 Years of IceCube Data (IceCube Collaboration, Schoenen et al.), TeVPA 2015; icrr.u-tokyo.ac.jp/indico/contribution Display.py?contribId=43&sessionId=6&confId=23.

Cosmic Ray Composition between ~1 PeV and ~1 EeV with 3 Years of IceTop and IceCube Data (IceCube Collaboration, de Ridder et al.), Helmholtz Alliance for Astroparticle Physics (HAP) Workshop 2015, Karlsruhe, Germany; indico.scc.kit.edu/ indico/event/95/session/2/ contribution/23/material/slides/0.pdf

Measuring the Muon Content of Air Showers with IceTop (IceCube Collaboration, Gonzales et al.), HAP 2015; indico.scc.kit.edu/indico/event/95/session/2/contribution/ 22/material/slides/0.pdf

Status of PINGU (IceCube-PINGU collaboration, Highnight et al.), Intl. Workshop for the Next Generation Nucleon Decay and Neutrino Detector, Stony Brook, New York (2015); indico.bnl.gov/getFile.py/access?contribId=30&sessionId=5&resId=0&materialId=slides& confId=1282

Systematics for Atmospheric Neutrinos in IceCube (IceCube Collaboration, Kuwabara et al.), 10th Intl. Workshop on Neutrino-Nucleus Interactions in the Few GeV Region (NuInt15), Osaka, Japan; JPS Conf. Proc. **12** 010014 (2016)

IceCube-Gen2: The Future of Neutrino Astronomy in Antarctica (IceCube Collaboration, Gonzales et al.), Miami 2015, Fort Lauderdale, Florida

IceCube: Revealing a Neutrino Picture of the Cosmos (IceCube Collaboration, Fazely et al.), Miami 2015

IceCube: Searches for Astrophysical Sources of Neutrinos (IceCube Collaboration, Coenders et al.), Lake Louise Winter Institute, Alberta, Canada; docushare.icecube.wisc. edu/dsweb/Get/ Document-76569/2016-02-12_coenders_icecube.pdf

On the Study of Solar Flares with Neutrino Observatories (IceCube Collaboration, de Wasseige et al.), 51st Rencontres de Moriond, *Electroweak Interactions and Unified Theories*, La Thuile, Italy; astro-ph.HE/160600681

Latest Results from IceCube on Neutrino Properties and Flux Types (IceCube Collaboration, Auffenberg et al.), 51st Moriond EW; indico.in2p3.fr/event/12279/session/3/ contribution/142/ material/slides/1.pdf

Astrophysical Neutrinos in IceCube: Observations & Prospects (IceCube Collaboration, Richman et al.), XXVIIIth Rencontres de Blois, *Particle Physics and Cosmology*, Blois, France (2016); indico.cern.ch/event/464174/contributions/1138029/attachments/1284938/ 1910645/04_richman.pdf

Understanding IceCube's Astrophysical Neutrino Observations (IceCube Collaboration, Taboada et al.), Proc. of Vulcano Workshop 2016, Sicily, Italy, Frascati Phys. Ser. **64** 156 (2017)

Constraints on Atmospheric Charmed-meson Production from IceCube (IceCube Collaboration, Palczewski et al.), Proc. of 14th Intl. Workshop on Meson Production, Properties and Interaction (Meson 2016), Kraków, Poland, EPJ Web Conf. **130** 05015 (2016); astro-ph.HE/161100816.

Highlights from IceCube (IceCube Collaboration, Aguilar et al.), 6th Roma Intl. Conf. on AstroParticle Physics (RICAP 2016), Rome, Italy

Measurement of the Cosmic-Ray Energy Spectrum and Composition with IceCube (IceCube Collaboration, Karg et al.), RICAP 2016

Astrophysical Neutrinos: IceCube Highlights (IceCube Collaboration, Tosi et al.), Proc. of 10th Cosmic Ray Intl. Seminar (CRIS 2016), Ischia, Italy, Nucl. Part. Phys. Proc. **291-3**, 167

Latest Results from IceCube (IceCube Collaboration, Rott et al.), 12th PATRAS Workshop on Axions, WIMPs and WISPs (PATRAS 2016), Jeju Island, South Korea

Atmospheric Neutrino Results from IceCube / DeepCore and Plans for PINGU (IceCube Collaboration, Koskinen et al.), Proc. of XXVII Intl. Conf. on Neutrino Physics and Astrophysics (Neutrino 2016), London, UK; J. Phys. Conf. Ser. **888** 1 012023 (2017)

Neutrino Astronomy with IceCube and Beyond (IceCube Collaboration, Kowalski et al.), Proc. of Neutrino 2016, J. Phys. Conf. Ser. **888** 1 012007 (2017)

Enhanced Starting-Track Event Selection for Diffuse Neutrinos in IceCube (IceCube Collaboration, Jero et al.), Neutrino 2016, J. Phys. Conf. Ser. **888** 1 012107 (2017)

A Search for Sterile Neutrinos with IceCube DeepCore (IceCube Collaboration, Terliuk et al.), Neutrino 2016, J. Phys. Conf. Ser. **888** 1 012113 (2017)

Results from the Search for eV-Sterile Neutrinos with IceCube (IceCube Collaboration, Argüelles et al.), Proc. of Neutrino 2016, J. Phys. Conf. Ser. **888** 1 012257 (2017)

Non-Standard Neutrino Interactions in IceCube (IceCube Collaboration, Melanie Day et al.), Neutrino 2016 (poster)

Atmospheric ν_τ Appearance Measurement with IceCube DeepCore (IceCube Collaboration, Larson et al.), Neutrino 2016 (poster)

Constraining Neutrino Oscillation Parameters with IceCube DeepCore (IceCube Collaboration, Eller et al.), Neutrino 2016 (poster)

An All-Sky Search for Muon Neutrinos Coincident with Observed Gamma-Ray Bursts in IceCube (IceCube Collaboration, Maunu, Felde et al.), Neutrino 2016 (poster)

Atmospheric Muon and Electron Neutrino Energy Spectrum Measured by First Year of IceCube-86 Detector (IceCube Collaboration, Kuwabara et al.), Proc. of Neutrino 2016; J. Phys. Conf. Ser. **888** 1 012112 (2017)

Astrophysics and Particle Physics with IceCube and Beyond (IceCube-Gen2 collaboration, DeYoung et al.), 22nd Intl. Symposium on Particles, Strings and Cosmology (PASCOS 2016), Quy Nhon, Vietnam

IceCube Real-Time Alert System (IceCube Collaboration, Satalecka et al.), Proc. of 6th Intl. Symposium on High-Energy Gamma-Ray Astronomy (Gamma2016), Heidelberg, Germany, AIP Conf. Proc.**1792** 1 070018 (2017).

New Optical Sensors for IceCube-Gen2 (IceCube-Gen2 collaboration, Peiffer et al.), Hyper-Kamiokande 7th Open Meeting, London, UK (2016).

Luminescence of Water or Ice as a New Detection Method for Magnetic Monopoles (IceCube Collaboration, Pollmann et al.), 5th Intl. Conf. on New Frontiers in Physics (ICNFP 2016), Kolymbari, Greece; astro-ph.IM/161006397

Neutrino Physics with IceCube – Latest Results (IceCube Collaboration, Kiryluk et al.), Xth Intl. Conf. on the Interconnection between Particle Physics and Cosmology (PPC 2016), São Paulo, Brazil; docushare.icecube.wisc.edu/dsweb/Get/Document-78778/jkiryluk_PPC2016.pdf

IceCube and the Discovery of High-Energy Cosmic Neutrinos. 14th Marcel Grossman Meeting on General Relativity, Rome, Italy, Intl. J. Mod. Phys. D **25** 14 1630028 (2016)

Latest Results on Indirect Dark Matter Searches with IceCube (IceCube Collaboration, Rott et al.), Identification of Dark Matter (IDM 2016), Sheffield, UK; docushare.icecube. wisc.edu/dsweb/Get/Document-77980/Rott_IDM2016.pdf

Tau Neutrino Appearance Analysis with DeepCore (IceCube Collaboration, Huang et al.), 38th Intl. Conf. on High Energy Physics (ICHEP 2016), Chicago, Illinois; docushare.icecube.wisc.edu/dsweb/Get/Document-78764/Huang_poster_nutau.pdf

υ_μ Disappearance with IceCube / DeepCore (IceCube Collaboration, Hignight et al.), ICHEP 2016; docushare.icecube.wisc.edu/dsweb/Get/Document-78773/hignight_muon_dis_v2.pdf

Non-Standard Neutrino Interactions in IceCube (IceCube Collaboration, Day et al.), ICHEP 2016; docushare.icecube.wisc.edu/dsweb/Get/Document-78785/Day-ICHEP2016 Portrait.pdf

Measurement of the Neutrino-Nucleon Cross-Section at Multi-TeV Energies with IceCube (IceCube Collaboration, Miarecki et al.), ICHEP 2016; docushare.icecube. wisc.edu/dsweb/Get/Document-78790/Miarecki.pdf

Search for Astrophysical Tau Neutrinos with IceCube (IceCube Collaboration, Xu et al.), ICHEP 2016; PoS ICHEP2016 452 (2017).

eV-scale Sterile Neutrinos at the IceCube Experiment (IceCube Collaboration, Jones et al.), NuFact: 12th Rencontres du Vietnam, Quy Nhon, Vietnam; docushare.icecube. wisc.edu/dsweb/Get/Document-78756/Jones%20NuFact.pdf

Recent IceCube / DeepCore Results & the PINGU Upgrade (IceCube Collaboration, Eller et al.), NuFact 2016; docushare.icecube.wisc.edu/dsweb/Get/Document-78789/ nufact_eller.pdf

Investigating Cosmic Rays and Air Shower Physics with IceCube / IceTop (IceCube Collaboration, Dembinski et al.), 19th Intl. Symposium on Very High Energy Cosmic Ray Interactions (ISVHECRI 2016), Moscow, Russia, EPJ Web Conf. **145** 01003 (2017)

Astrophysical Neutrinos from IceCube (IceCube Collaboration, Rongen et al.), Lake Baikal Three Messenger Conference, Listvyanka, Russia (2016); docushare.icecube. wisc.edu/dsweb/Get/ Document-78783/baikal_overview_rongen.pdf

Recent Developments in the IceCube Detector Calibration (IceCube Collaboration, Martin Rongen et al.), Lake Baikal Three Messenger Conference (2016); docushare.icecube.wisc.edu/dsweb/Get/Document-78784/baikal_calibration_rongen.pdf

Astroparticle Physics @ IceCube Observatory (IceCube Collaboration, In et al.), XLVI Intl. Symposium on Multiparticle Dynamics (ISMD 2016), Jeju Island, South Korea; docushare. icecube.wisc.edu/dsweb/Get/Document-78777/ISMD2016_Jin%20In.pdf

Experimental Neutrino Astronomy (Some Recent Results and Future Prospects) (IceCube Collaboration, Niederhausen et al.), Interplay between Particle and Astroparticle Physics (IPA 2016), Orsay, France (2106); docushare.icecube.wisc.edu/ dsweb/Get/Document-78376/ IPA16_NuAstro_Niederhausen.pdf

Neutrino Astronomy at the South Pole: Latest Results from the IceCube Neutrino Observatory and Its Future Development (IceCube Collaboration, Toscano et al.), Proc. of 9th Intl. Workshop on Ring Imaging Cherenkov Detectors (RICH 2016), Lake Bled, Slovenia, Nucl. Instrum. Meth. A **876** 72 (2017)

Development of a Machine-Learning–Based Analysis Chain for the Measurement of Atmospheric-Muon Spectra with IceCube (IceCube Collaboration, Fuchs et al.), XXVth European Cosmic Ray Symposium, Turin, Italy (ECRS 2016), inspirehep.net/ record/1509195; astro-ph.IM/170104067

Time-Dependent Point-Source Searches with the IceCube Detector (IceCube Collaboration, Christov et al.), TeV Particle Astrophysics (TeVPA 2016), Meyrin, Switzerland; indico.cern.ch/ event/469963/contributions/2264037/attachments/1334456/ 2006715/Christov_12.97.2016_ TeVPA.pdf

Results from the Search for eV-sterile Neutrinos with IceCube (IceCube Collaboration, Argüelles et al.), TeVPA 2016; indico.cern.ch/event/469963/contributions/2264036/

Dark Matter Searches with IceCube (IceCube Collaboration, Medici et al.), TeVPA 2016; indico.cern.ch/event/469963/contributions/2275467/

IceCube and the Development of Neutrino Astronomy (IceCube Collaboration, Kurahashi et al.), TeVPA 2016; indico.cern.ch/event/469963/contributions/2277624/

Neutrino Physics with the PINGU Extension of IceCube (IceCube Collaboration, Koskinen et al.), TeVPA 2016; indico.cern.ch/event/469963/contributions/2264035/

Anisotropy in Cosmic-Ray Arrival Directions with 6 Years of Data from the IceCube Detector (IceCube Collaboration, McNally et al.), TeVPA 2016; docushare.icecube.wisc.edu/dsweb/Get/Document-78765/McNally%20TeVPA2016.pdf

Neutrino Astronomy with IceCube (IceCube Collaboration, Meagher et al.), Proc. of IAU Symposium 324, New Frontiers in Black Hole Astrophysics, Ljubljana, Slovenia, **12** S324 322 (2016); docushare.icecube.wisc.edu/ dsweb/Get/Document-78942/Meagher_ Blackhole2016.pdf

Statistical Approaches for IceCube, DeepCore, and PINGU Neutrino Oscillation Analyses (IceCube Collaboration, Hignight et al.), Workshop on Statistical Issues in Experimental Neutrino Physics (PhyStat-υ), Fermilab, Batavia, Illinois (2016); docushare.icecube.wisc.edu/dsweb/Get/Document-78775/hignight_deepcore_pingu_phystat.pdf

Statistical Issues in High-Energy Neutrino Searches with IceCube (IceCube Collaboration, Jero et al.), PhyStat-υ (2016); docushare.icecube.wisc.edu/dsweb/ View/Collection-14090

Blind Analyses in the High-Statistics Regime with Atmospheric Neutrinos in DeepCore (IceCube Collaboration, Hignight et al.), PhyStat-υ (2016); docushare.icecube.wisc.edu/ dsweb/Get/Document-78774/hignight_blind_analysis_phystat.pdf

Exploring the Universe with Neutrinos: Recent Results from IceCube (IceCube Collaboration, Xu et al.), Proc. of 14th Intl. Workshop on Tau Lepton Physics (TAU 2016), Beijing, China, Nucl. Part. Phys. Proc. **287-8** 139 (2017); astro-ph.HE/ 170205244

Constraints on UHECR Sources from IceCube (IceCube Collaboration, Ishihara et al.), Intl. Conf. on Ultra–High-Energy Cosmic Rays (UHECR2016), Kyoto, Japan; indico.cern.ch/event/504078/contributions/2305999/

IceCube-Gen2: The Next-Generation Neutrino Observatory in Antarctica (IceCube Collaboration, Lu et al.), UHECR2016; indico.cern.ch/event/504078/contributions/2306689/

Recent High-Energy Results with IceCube (IceCube Collaboration, Glüsenkamp et al.), Proc. of 11th Workshop on Science with the New Generation of High-Energy Gamma-Ray Experiments, Cascina, Italy (2016), Nuovo Cim. C **40** 3 139 (2017)

IceCube's Low-Energy Side: DeepCore and PINGU (IceCube-Gen2 collaboration, Yáñez et al.), Intl. Workshop on Next-Generation Nucleon Decay and Neutrino Detectors (NNN 16), Beijing, China; docushare.icecube.wisc.edu/dsweb/Get/Document-78939/2016_NNN_ DeepCore_PINGU_v2.pdf

IceCube – Gen2: Technical Developments (IceCube-Gen2 collaboration, Yáñez et al.), NNN 16; docushare.icecube.wisc.edu/dsweb/Get/Document-78940/2016_NNN_ Gen2 Technical_v2.pdf

IceCube and the Development of High-Energy Neutrino Astronomy (IceCube Collaboration, Kurahashi Neilson et al.), Double-Beta Decay and Underground Science Workshop, Osaka,

Japan (2016); docushare.icecube.wisc.edu/dsweb/Get/ Document-79250/073_IceCube_ Naoko KurahashiNeilson.pdf

Neutrino Astronomy with IceCube and Beyond (IceCube Collaboration, Meagher et al.), NuPhys2016, London, UK, C16-12-12.1 25; astro-ph.he/1705.00383

Improved Detection of Supernovae with the IceCube Observatory (IceCube Collaboration, Köpke et al.), 8th Symposium on Large TPCs for Low-Energy Rare-Event Detection (TPC 2016), Paris, France; astro-ph.HE/1704.03823

Neutrino Physics with IceCube (IceCube Collaboration, DeYoung et al.), Miami 2016, Ft. Lauderdale, Florida, docushare.icecube.wisc.edu/dsweb/Get/Document-78966/Miami2016.pdf

IceCube: High-Energy Neutrino Window on the Universe (IceCube Collaboration, Adams et al.), 13th Intl. Symposium on Cosmology and Particle Astrophysics (CosPA 2016), Sydney, Australia; docushare.icecube.wisc.edu/dsweb/Get/Document-78859/cospa_ 16_adams.pdf

Status of IceCube and SN Sensitivity (IceCube Collaboration, Rott et al.), Workshop on Supernova at Hyper-K, Tokyo, Japan (2017); docushare.icecube.wisc.edu/dsweb/Get/ Document-79246/SN1987A_Tokyo_Rott_Feb2017.pdf

IceCube: Recent High-Energy Results (IceCube Collaboration, Glüsenkamp et al.), Lake Louise Winter Institute, Alberta, Canada (2017); docushare.icecube.wisc.edu/dsweb/View/ Collection-14325/Document-79247

Measurement of the ν_μ Atmospheric Disappearance with IceCube/DeepCore (IceCube Collaboration, Hignight et al.), Lake Louise Winter Institute, docushare.icecube.wisc.edu/ dsweb/Get/Document-79248/hignight_muon_dis.pdf

Searches for Sterile Neutrinos with IceCube (IceCube Collaboration, Terliuk et al.), XVII Intl. Workshop on Neutrino Telescopes (NEUTEL 2017), Venice, Italy, PoS 045 (2018); docushare.icecube.wisc.edu/dsweb/Get/Document-81593/Terliuk_proceedings_V4.pdf

A Vision for Neutrino and Particle Physics at the South Pole (IceCube Collaboration, Athayde Marcondes de André et al.), NEUTEL 2017; docushare.icecube.wisc.edu/ dsweb/Get/Document-81610/JP%20proceedings.pdf

IceCube: Astrophysics Results (IceCube Collaboration, Spiering et al.), Proc. of. NEUTEL 2017, PoS 083 (2018).

IceCube Observations of High-Energy Neutrinos (IceCube Collaboration, DeYoung et al.), Precision Investigations of the Neutrino Sector (PINS 2017), SLAC, Palo Alto, California, slac.stanford.edu/~alexfr/PINS2017/pins2017talks/DeYoung-PINS2017.pdf

IceCube Sterile Search (IceCube Collaboration, Argüelles et al.), PINS 2017, slac.stanford.edu/ ~alexfr/PINS2017/pins2017talks/IceCubeSterile-PINS2017.pdf

Latest Results from IceCube (IceCube Collaboration, Rott et al.), Intl. Conf. on Interconnections between Particle Physics and Cosmology, Corpus Christi, Texas (PPC 2017), icecube.wisc.edu/~carott/Talks/PPC2017/Rott_PPC_May_2017.pdf

Conference Presentations and Proceedings

Recent Results from IceCube on Neutrino Oscillations (IceCube Collaboration, Athayde Marcondes de André et al.), 52nd Rencontres de Moriond, *Electroweak Interactions and Unified Theories*, La Thuile, Italy; docushare.icecube.wisc.edu/dsweb/Get/Document-80039/ 2017_Moriond_jpamdeandre.pdf

New Results from IceCube (IceCube Collaboration, Palczewski, et al.), Aspen 2017 Winter Conf., Colorado; docushare.icecube.wisc.edu/dsweb/Get/Document-80989/Aspen-TP.pdf

Astrophysical Neutrinos and the Search for Their Origins (IceCube Collaboration, Vandenbroucke et al.), Surveying the Fast-Changing Multi-Wavelength Sky, Qiannan, China (2017); indico.in2p3.fr/event/13872/contributions/15612/

Recent Results from IceCube (IceCube Collaboration, Chad Finley et al.), IceCube Particle Astrophysics Symposium, Madison, Wisconsin (IPA 2017); events.icecube. wisc.edu/ contributionList Display.py?confId=82

Search for Diffuse Neutrino Emission from the Galactic Plane with 7 Years of IceCube Data (IceCube Collaboration, Haack et al.), IPA 2017; events.icecube.wisc.edu/ contributionDisplay.py?contribId=15&sessionId=4&confId=82

Astrophysical Tau Neutrinos in IceCube (IceCube Collaboration, Xu et al.), IPA 2017; dropbox.com/s/avad0uikx5z6y3o/TauNeutrino_IceCube_IPA2017.pdf?dl=0

Search for Heavy Dark Matter Decay with IceCube (IceCube Collaboration, Dujmovic et al.), IPA 2017; events.icecube.wisc.edu/contributionListDisplay.py?confId=82

Measurement of Atmospheric ν_μ Disappearance with IceCube / DeepCore (IceCube Collaboration, Athayde Marcondes de André et al.), IPA 2017; docushare.icecube. wisc.edu/ dsweb/Get/Document-80947/201705_IPA_jpamdandre%20(1).pdf

Search for High-Energy Neutrino Emission from Fast Radio Bursts (IceCube Collaboration, Fahey et al.), IPA 2017; docushare.icecube.wisc.edu/dsweb/Get/Document-80975/Fahey% 20IPA%20slides.pdf

The Enhanced Starting Track Event Selection (ESTES) (IceCube Collaboration, Jero et al.), IPA 2017; docushare.icecube.wisc.edu/dsweb/Get/Document-80949/IPA_Draft_Slides_ ESTES_ KJERO.pdf

Testing the Neutrino Mass Ordering with Multiple Years of IceCube / DeepCore (IceCube Collaboration, Leuermann et al.), IPA 2017; docushare.icecube.wisc.edu/ dsweb/Get/Document-80952/Leuermann%202017_IPA_NMO_v2.pdf

Detector Systematics in IceCube Neutrino Oscillation Analyses (IceCube Collaboration, Rongen et al.), IPA 2017; docushare.icecube.wisc.edu/dsweb/Get/Document-80953/ IPA_LE_systematics_ rongen.pdf

Searches for Astrophysical Sources of Neutrinos Using Cascade Events in IceCube (IceCube Collaboration, Richman et al.), IPA 2017; docushare.icecube.wisc.edu/dsweb/ Get/Document-80955/2017_ipa_mrichman.pdf

Search for Point-Like Sources in the Astrophysical Muon Neutrino Flux with IceCube (IceCube Collaboration, Reimann et al.), IPA 2017; docushare.icecube.wisc.edu/dsweb/Get/ Document-80973/IPA_Reimann.pdf

Muon Energy Reconstruction Methods for the IceCube Neutrino Observatory (IceCube Collaboration, Robertson et al.), IPA2017; docushare.icecube.wisc.edu/dsweb/Get/ Document-80974/IPA_Robertson.pdf

Astrophysical Neutrinos at IceCube, a New Window to the Cosmos (IceCube Collaboration, Rameez et al.), Rencontres de Blois, France (2017); docushare.icecube.wisc.edu/dsweb/Get/ Document-80950/Rameez%20Blois%20slides.pdf

Recent Results from IceCube (IceCube Collaboration, Montaruli et al.), Invisibles 17 Workshop, Murten, Switzerland (2017); docushare.icecube.wisc.edu/dsweb/Get/Document-80984/ invisible17_montaruli.pdf

Indirect Dark Matter Searches in IceCube (IceCube Collaboration, Medici et al.), 26th Intl. Workshop on Weak Interactions and Neutrinos (WIN2017), Irvine, California; indico.fnal.gov/ contributionDisplay.py?contribId=55&confId=9942

Neutrino Absorption in the Earth and Measurement of the Neutrino-Nucleon Cross-Section at Multi-TeV Energies with IceCube (IceCube Collaboration, Binder et al.), WIN2017; indico.fnal.gov/contributionDisplay.py?contribId=112&confId=9942

Imaging Galactic Dark Matter with IceCube's High-Energy Cosmic Neutrinos (IceCube Collaboration, Kheirandish et al.), WIN2017; indico.fnal.gov/event/9942/contribution/22

Recent Results from the IceCube Neutrino Observatory (IceCube Collaboration, Grant et al.), WIN2017; indico.fnal.gov/contributionDisplay.py?contribId=152&confId=9942

Searches for Magnetic Monopoles with IceCube (IceCube Collaboration, Pollmann et al.), Proc. of 13th Intl. Conf. on Gravitation, Astrophysics and Cosmology (ICGAC-13), Seoul, Korea (2017), EPJ Web Conf **168** 04010 (2018)

A Summary of Recent Updates in the Search for Cosmic-Ray Sources Using the IceCube Detector (IceCube Collaboration, Carver et al.), Proc. of European Physical Society Conf. on High-Energy Physics, Venice, Italy, PoS EPS-HEP2017 003 (2018)

Search for Neutrinos from Short Transients with IceCube's Optical and X-Ray Follow-Up Program (IceCube Collaboration, Strotjohann et al.), European Week of Astronomy and Space Science, Prague, Czech Republic (2017)

Transients with IceCube (IceCube Collaboration, Franckowiak et al.), Radio-γ-Ray: Transient Alert Mechanisms (Rγ-TAM), Amsterdam, Netherlands (2017)

New Measurement of Atmospheric nu Oscillations with IceCube (IceCube Collaboration, DeYoung et al.), XV Intl. Conf. on Topics in Astroparticle and Underground Physics (TAUP 2017), Sudbury, Ontario; docushare.icecube.wisc.edu/dsweb/Get/Document-81061/DeYoung_ TAUP_2017.pdf

Testing the Neutrino Mass Ordering with Multiple Years of IceCube / DeepCore (IceCube Collaboration, Leuermann et al.), TAUP 2017; docushare.icecube.wisc.edu/ dsweb/Get/ Document-81601/Leuermann_NMO_v7.pdf

Measurements of Tau Neutrino Appearance with IceCube / DeepCore (IceCube Collaboration, Larson et al.), TAUP 2017; docushare.icecube.wisc.edu/dsweb/Get/Document-81602/larson_tau Appearance_v3.pdf

Indirect Dark Matter Searches in IceCube (IceCube Collaboration, Medici et al.), TAUP 2017; docushare.icecube.wisc.edu/dsweb/Get/Document-81603/MMedici_TAUP2017%20slides.pdf

Recent Highlights from IceCube (IceCube Collaboration, Argüelles et al.), 13th Rencontres du Vietnam, Quy Nhon (2017); docushare.icecube.wisc.edu/dsweb/Get/ Document-81594/ Arguelles%20slides.pdf

Precision Neutrino Properties in Ice (IceCube Collaboration, DeYoung et al.), Rencontres du Vietnam (2017); docushare.icecube.wisc.edu/dsweb/Get/Document-80881/DeYoung_Vietnam_ 2017.pdf

Search for Solar Atmospheric Neutrinos with IceCube (IceCube Collaboration, Rott et al.), TeV Particle Astrophysics (TeVPA 2017), Columbus, Ohio; docushare.icecube. wisc.edu/dsweb/ Get/Document-81596/TeVPA_Sun_Rott_slides.pdf

Search for Neutrino Emission from Fast Radio Bursts with IceCube (IceCube Collaboration, Xu et al.), TeVPA 2017; docushare.icecube.wisc.edu/dsweb/Get/Document-81597/Slides_DXU.pdf

High Energy Astrophysical Neutrino Flux Measurement Using Nu-Induced Cascades Observed in 4 Years of IceCube Data (IceCube Collaboration, Niederhausen et al.), TeVPA 2017; docushare.icecube.wisc.edu/dsweb/Get/Document-81066/TeVPA2017_ Niederhausen_Cascades.pdf

IceCube Search for Galactic Neutrino Sources Using the HAWC 2HWC Catalog (IceCube Collaboration, J. Wood et al.), TeVPA 2017; docushare.icecube.wisc.edu/ dsweb/Get/Document-81100/Joint%20IceCube%20HAWC%20TeVPA%202017.pdf

Multi-Flavour PeV Neutrino Search (IceCube Collaboration, Lu et al.), TeVPA 2017; docushare. icecube.wisc.edu/dsweb/Get/Document-81598/TeVPA_PEPE.pdf

Searches for Astrophysical Sources of Neutrinos Using Cascade Events in IceCube (IceCube Collaboration, Richman et al.), TeVPA 2017; docushare.icecube.wisc.edu/ dsweb/Get/Document-81599/2017_tevpa_mrichman.pdf

Measurement of Neutrino Events above 1 TeV with Contained Vertices (IceCube Collaboration, Wandkowsky et al.), TeVPA 2017; docushare.icecube.wisc.edu/dsweb/Get/ Document-81056/ TeVPA_NancyWandkowsky_StartingEvents.pdf

A New IceCube Starting Track Event Selection and Realtime Event Stream (IceCube Collaboration, Mancina et al.), TeVPA 2017; docushare.icecube.wisc.edu/dsweb/ Get/Document-81600/ESTES_SMancina.pdf

Status of IceCube-Gen2 (IceCube Collaboration, Yuan et al.), TeVPA 2017; docushare.icecube. wisc.edu/dsweb/Get/Document-81058/gen2.pdf

Conference Presentations and Proceedings

New Measurement of Atmospheric Neutrino Oscillations with IceCube (IceCube Collaboration, DeYoung et al.), TeVPA 2017; docushare.icecube.wisc.edu/dsweb/Get/ Document-81058/ gen2.pdf

Search for PeV Gamma Rays with IceTop and IceCube (IceCube Collaboration, Griffith et al.), TeVPA 2017; docushare.icecube.wisc.edu/dsweb/Get/Document-81065/TeVPA% 20Gamma% 20Ray%20Presentation.pdf

Search for Neutrinos from Short Transients with IceCube's Optical and X-Ray Follow-Up Program (IceCube Collaboration, Strotjohann et al.), 15th Anniversary of MASTER Global Robotic Net, Moscow, Russia; docushare.wipac.wisc.edu/dsweb/Get/Document-81028/2017_ moskau.pdf

Magnetic Monopole Searches with IceCube (IceCube Collaboration, Lauber et al.), 6th Intl. Conf on New Frontiers in Physics, Kolymbari, Greece (2017), docushare.icecube. wisc.edu/dsweb/Get/Document-81060/icnfp.pdf

Astrophysics and Particle Physics with IceCube Neutrinos (IceCube Collaboration, Ackerman et al.), 18th Lomonsov Conference, Moscow, Russia (2017); docushare.icecube.wisc.edu/dsweb/ Get/Document-81154/Lomonosov_Talk_IceCube.pdf

Recent Results from IceCube (IceCube Collaboration, Williams), 21st Particles & Nuclei Intl. Conf., Beijing, China (PANIC 2017), Intl. J. of Mod. Phys. **46** 1860048 (2018).

Status and Prospects of the IceCube Neutrino Telescope (IceCube Collaboration, Ackerman et al.), Perspectives in Astroparticle physics from High Energy Neutrinos (PAHEN 2017), Naples, Italy; docushare.icecube.wisc.edu/dsweb/Get/Document-81377/ PAHEN_talk_IceCube_ Status.pdf

IceCube: Building a New Window on the Universe, PAHEN 2017; docushare.icecube. wisc.edu/dsweb/Get/Document-81611/PAHEN17_Halzen.pdf

High-Statistics and GPU-Accelerated Data Analysis in IceCube (IceCube Collaboration, Eller et al.), 18th Intl. Workshop on Advanced Computing and Analysis Techniques in Physics Research (ACAT 2017), Seattle, Washington, J. Phys. Conf. Ser. **1085** 4 042033 (2018); indico.cern.ch/event/567550/contributions/2638704/

Atmospheric Neutrino Physics with IceCube DeepCore (IceCube Collaboration, Blot et al.), Mt. Elbrus Conference from Deep Underground up to the Sky, Terskol, Russia; docushare.icecube.wisc.edu/dsweb/Get/Document-81363/APPEC_MountElbrus_SBlot_2017.pdf

Tau Neutrino Appearance in IceCube (IceCube Collaboration, Eller et al.), 19th Intl. Workshop on Neutrinos from Accelerators (NUFACT2017), Uppsala, Sweden; docushare.icecube.wisc.edu/ dsweb/Get/Document-81360/nufact2017.pdf

IceCube DeepCore Results and PINGU (IceCube Collaboration, Ehrhardt et al.), NUFACT2017; PoS 060 (2018)

GeV Neutrino Astronomy: The Case of Solar Flares (IceCube Collaboration, de Wasseige et al.), MANTS 2017, Marseille, France; docushare.icecube.wisc.edu/dsweb/ Get/Document-81605/ DeWasseigeslides.pdf

IceCube Calibration (IceCube Collaboration, Blot et al.), MANTS 2017

Probing Cosmic Ray Anisotropy with Atmospheric Neutrinos (IceCube Collaboration, Wills et al.), Cosmic Ray Anisotropy Workshop (CRA2017), Guadalajara, Mexico; events.icecube.wisc.edu/contributionDisplay.py?contribId=54&sessionId=26&confId=84

Cosmic Ray Anisotropy with the IceCube Observatory (IceCube Collaboration, Desiati et al.), CRA2017, events.icecube.wisc.edu/getFile.py/access?contribId=6&sessionId=8&resId=0&materialId=slides&confId=84

Search for GeV Neutrinos Associated with Solar Flares (IceCube Collaboration, de Wasseige et al.), 7th Intl. Fermi Symposium, Garmisch-Partenkirchen, Germany (2017), PoS IFS2017 (2020), 174; docushare.icecube.wisc.edu/dsweb/Get/Document-81608/GwendeWasseigeslides.pdf

IceCube & Gen2: Atmospheric and Oscillation Results and Status (IceCube Gen2 collaboration, Koskinen et al.), Intl. Workshop on Next-generation Nuclear decay and Neutrino detectors (NNN2017), Coventry, UK, docushare.icecube.wisc.edu/dsweb/ Get/Document-81550/ Koskinen_ IceCube_NNN_2017_v2.pdf

IceCube Searches for the Galactic Sources of High-Energy Cosmic Neutrinos (IceCube Collaboration, Kheirandish et al.), Joint Space-Science Institute Workshop, Annapolis, MD, docushare.icecube.wisc.edu/dsweb/Get/Document-81677/Alislidesjsi_v1.pdf

Model Independent Measurement of the Atmospheric Muon Neutrino Energy Spectrum with 3 Years of IceCube Data (IceCube Collaboration, Börner, et al.), 29th Intl. Texas Symposium on Relativistic Astrophysics, Cape Town, South Africa (2017); docushare.icecube.wisc.edu/dsweb/Get/Document-81713/Boerner%20slides_texas.pdf

Stacking Point Source Search of a Lower Energy Neutrino Contribution at the HESE Track Positions (IceCube Collaboration, Menne, et al.), TEXAS 2017; docushare.icecube.wisc.edu/dsweb/Get/Document-81716/TEXAS_2017_slides%20tmenne.pdf

Recent Results from IceCube (IceCube Collaboration, C. Kopper et al.), Miami 2017, Fort Lauderdale, Florida; docushare.icecube.wisc.edu/dsweb/Get/Document-81749/Kopper% 20slides.pdf

Recent Results from IceCube / DeepCore (IceCube Collaboration, Philipp Eller et al.), NuPhys17: Prospects in Neutrino Physics, London, UK; docushare.icecube.wisc.edu/dsweb/Get/Document-81750/nuphys2017_eller.pdf

The Search for High Energy Neutrinos: A TDE Stacking Analysis (IceCube Collaboration, Robert Stein et al.), Aspen Winter Conference (2017); docushare.wipac.wisc.edu/dsweb/Get/Document-81940/stein_aspen_18%20copy.pdf

Cosmic Ray Composition with IceTop and IceCube (IceCube Collaboration, Sam De Ridder et al.), Searching for the Sources of Galactic and extra-Galactic Cosmic Rays, Brussels, Belgium (2017); indico.iihe.ac.be/indico/getFile.py/access?contribId=3&sessionId=5&resId=0&materialId=slides&confId=1153

The anisotropies and origins of ultrahigh-energy cosmic rays, Thirteenth International Conference on the Intersections of Particle and Nuclear Physics (CIPANP), Palm Springs, CA (2018); astro-ph.HE/1810.02484.

Conference Presentations and Proceedings

The IceCube Neutrino Observatory: Future Plans (IceCube Collaboration, Tyce DeYoung et al.), Lake Louise Winter Institute, Alberta (2018); docushare.icecube. wisc.edu/dsweb/Get/Document-82126/IceCube%20Upgrade%20Lake%20Louise.pdf

Recent Highlights from the IceCube Neutrino Observatory (IceCube Collaboration, Justin Vandenbroucke et al.), Lake Louise Winter Institute; indico.cern.ch/event/ 531125/contributions/ 2858610/

Highlights from the IceCube Observatory (IceCube Collaboration, Ali Kheirandish et al.), The Particle Frontier, Aspen Winter Conference, Colorado (2018); docushare.icecube. wisc.edu/ dsweb/Get/Document-82702/Ali%20slides.pdf

Recent (Lower Energy) Results from IceCube (IceCube Collaboration, Jim Madsen et al.), PACIFIC 2018, Akaigawa, Japan (2018); conferences.pa.ucla.edu/pacific-2018/ talks/madsen.pdf

Solar Atmospheric Neutrino Searches with IceCube Neutrino Telescope (IceCube Collaboration, Seongjin In et al.) [poster], UCLA Dark Matter 2018, Los Angeles, CA; docushare.icecube.wisc.edu/dsweb/Get/Document-82715/In%20poster.pdf

Searches for Tau Neutrinos from Oscillations with IceCube / DeepCore (IceCube Collaboration, Michael Larson et al.), 53rd Rencontres de Moriond, Electroweak Interactions and Unified Theories, La Thiule, Italy; indico.in2p3.fr/event/16579/ contributions/60859/attachments/47322/ 59483/moriond_larson_v3.pdf

TeV – PeV Neutrino – Nucleon Cross Section Measurement with 5 years' IceCube Data (IceCube Collaboration, Yiqian Xu et al.), XXVI Intl. Workshop on Deep Inelastic Scattering and Related Subjects, Kobe, Japan (2018); indico.cern.ch/event/656250/ contributions/2892330/

High-Energy Neutrino Interaction Physics with IceCube (IceCube Collaboration, Spencer Klein, et al.), 20th Intl. Symposium on Very High Energy Cosmic Ray Interactions (ISVHECRI 2018), Nagoya, Japan; docushare.icecube.wisc.edu/dsweb/Get/Document-85014/Klein%20 proceedings.pdf

Muon Measurement with IceTop (IceCube Collaboration, Javier Gonzalez, et al.), ISVHECRI 2018; docushare.icecube.wisc.edu/dsweb/Get/Document-82654/jgonzalez_ icetop_muons.pdf

Atmospheric Muons Measured with IceCube (IceCube Collaboration, Dennis Soldin et al.), ISVHECRI 2018; docushare.icecube.wisc.edu/dsweb/Get/Document-85185/Soldin%20 proceedings.pdf

Present Status and Physics Prospects of PINGU, (IceCube-Gen2 collaboration, Joshua Hignight et al.), Advanced Workshop on Physics of Atmospheric Neutrinos (PANE 2018), Trieste, Italy; indico.ictp.it/event/8312/session/92/contribution/550/material/slides/0.pdf

Measurement of Atmospheric Neutrino Oscillations with IceCube and DeepCore (IceCube Collaboration, Tom Stuttard et al.), PANE 2018; indico.ictp.it/event/8312/ session/89/contribution/ 541/material/slides/0.pdf

Search for NSI with IceCube DeepCore (IceCube Collaboration, Thomas Ehrhardt et al.) [poster], PANE 2018; docushare.icecube.wisc.edu/dsweb/Get/Document-82701/Ehrhardt %20poster.pdf

Astrophysical Neutrinos with IceCube (IceCube Collaboration, Spencer Klein et al.), 13th Conf. on the Intersections of Particle and Nuclear Physics (CIPANP 2018), Palm Springs, CA; docushare.icecube.wisc.edu/dsweb/Get/Document-82708/Klein%20slides.pdf

IceCube / DeepCore Results on Neutrino Properties Using Atmospheric Neutrinos (IceCube Collaboration, Feifei Huang et al.), CIPANP 2018; docushare.icecube.wisc.edu/ dsweb/Get/ Document-82709/Huang%20slides.pdf

IceCube: Opening a New Window on the Universe from the South Pole, CIPANP 2018; conferences.lbl.gov/event/137/session/6/contribution/31

Point-Source Searches with IceCube (IceCube Collaboration, Stéphanie Bron et al.), 30th Rencontres de Blois, *Particle Physics and Cosmology*, Blois, France (2018); docushare. icecube.wisc.edu/dsweb/Get/Document-82710/Bron%20slides.pdf

Neutrino Aspects of Multimessenger Astronomy, 24th Intl. Symposium on Particles, Strings & COSmology (PASCOS 2018), Cleveland, OH; indico.cern.ch/event/ 706475/contributions/ 2977851/

Multi-Messenger Results from the IceCube Neutrino Observatory (IceCube Collaboration, Chad Finley et al.), Gravitational-waves, ElectroMagnetic and dark-Matter Physics Workshop (GEMMA 2018), Piazetta Tancredi, Italy (2018); docushare.icecube.wisc.edu/dsweb/Get/ Document-82753/Finley_slides.pdf

Recent Results on Dark Matter Searches with the IceCube Neutrino Telescope (IceCube Collaboration, Carlos de los Heros et al.), GEMMA 2018; docushare.icecube.wisc.edu/ dsweb/Get/Document-82667/delosheros_GEMMAv01.pdf

New Physics Searches with TeV Neutrinos in IceCube (IceCube Collaboration, Carlos Argüelles et al.) [poster], XXVIIIth Intl. Conf. on Neutrino Physics and Astrophysics (Neutrino 2018); Heidelberg, Germany; zenodo.org/record/1301080#.W9sLHHpKgyA

Sensitivity of Multi-PMT Optical Modules to MeV Supernova Neutrinos in South Pole Ice (IceCube Collaboration, Christian Lozano et al.) [poster], Neutrino 2018; zenodo.org/ communities/neutrino2018/search?page=1&size=20&q=Lozano

Search for Non-standard Neutrino Interactions with IceCube DeepCore (IceCube Collaboration, Thomas Ehrhardt et al.) [poster], Neutrino 2018; zenodo.org/record/1302934#.W9sMGHpKgyA

New Measurement of the Flavor Composition of High-Energy Neutrino Events with Contained Vertices in IceCube (IceCube Collaboration, Juliana Stachurska, et al.) [poster], Neutrino 2018; zenodo.org/record/1301122#.W9sMdHpKgyA

The IceCube Upgrade: The First Step toward IceCube-Gen2 (IceCube-Gen2 collaboration, Justin Evans et al.) [poster], Neutrino 2018; docushare.icecube.wisc.edu/dsweb/Get/ Document-82694/Evans%20poster.pdf

Dark Rates Induced by Radioactive Decays in Optical Modules for Neutrino Telescopes (IceCube Collaboration, Martin Unland et al.) [poster], Neutrino 2018; zenodo.org/record/ 1300859#.W9sN3XpKgyA

Improving Astrophysical Tau Neutrino Identification with IceCube Waveforms (IceCube Collaboration, Maximilian Meier et al.) [poster], Neutrino 2018; zenodo.org/record/1302978#.W9sOlHpKgyA

Results from Testing the Neutrino Mass Ordering with 3 Years of IceCube DeepCore Data (IceCube Collaboration, Martin Leuermann et al.) [poster], Neutrino 2018; zenodo.org/record/1300550#.W9sQnnpKgyA

Results on Astrophysical Neutrinos Using 7.5 Years of High-Energy Events with Contained Vertices (IceCube Collaboration, Nancy Wandkowsky et al.) [poster], Neutrino 2018; zenodo.org/record/1301088#.W9sQ3npKgyA

Searching for Optical Counterparts to High-Energy Neutrino Sources with the Zwicky Transient Facility (IZTF and IceCube collaborations, Ludwig Rauch et al.) [poster], Neutrino 2018; zenodo.org/record/1300731#.W9sIO3pKgyA

Improving Reconstruction of GeV-Scale Neutrinos in IceCube – DeepCore by Direct Event Simulation (IceCube Collaboration, Sarah Nowicki et al.) [poster], Neutrino 2018; zenodo.org/record/1300644#.W9sRfXpKgyA

Searching for Transient Neutrino Sources with IceCube in RealTime (IceCube Collaboration, Thomas Kinstcher et al.) [poster], Neutrino 2018; zenodo.org/record/1300867#.W9sIr3pKgyA

New Measurements with High-Energy Neutrinos in IceCube (IceCube Collaboration, Tianlu Yuan et al.) [poster], Neutrino 2018; zenodo.org/record/1300506#.W9sRuXpKgyA

Environmental Decoherence in Atmospheric Neutrinos with IceCube (IceCube Collaboration, Thomas Stuttard et al.) [poster], Neutrino 2018; zenodo.org/record/1300530#.W9sSE3pKgyA

IceCube Study of Down-going Neutrinos for the Spectral Cutoff Determination (IceCube Collaboration, Tomasz Palczewski et al.) [poster], Neutrino 2018; zenodo.org/record/1297679#.W9sSY3pKgyA

Latest Measurements of Atmospheric Neutrino Oscillation Parameters with IceCube – DeepCore (IceCube Collaboration, Elim Cheung et al.) [poster], Neutrino 2018; zenodo.org/record/1300534#.W9sSoHpKgyA

Search for Solar Atmospheric Neutrinos with the IceCube Neutrino Observatory (IceCube Collaboration, Carsten Rott et al.) [poster], Neutrino 2018, zenodo.org/record/1300659#.W9sS8HpKgyA

Latest Neutrino Physics Results from IceCube and ANTARES (IceCube and ANTARES collaborations, Tyce DeYoung et al.), Neutrino 2018; zenodo.org/record/1286852#.W9sTHHpKgyA

A View of the Universe with the IceCube and ANTARES Neutrino Telescope (ANTARES and IceCube collaborations, Ignacio Taboada et al.), Neutrino 2018; zenodo.org/record/1286919#.W9sTo3pKgyA

Combined Search for Dark Matter with the ANTARES and IceCube Neutrino Telescopes (ANTARES and IceCube collaborations, Juande Zornoza, et al.) [poster], Neutrino 2018; zenodo.org/record/1300924#.W9sUDXpKgyA

Recent Results from IceCube (IceCube Collaboration, David Seckel et al.), 8th Intl. Workshop on Acoustic & Radio EeV Neutrino detection Activities (ARENA 2018), Catania, Italy; docushare. icecube. wisc.edu/dsweb/ Get/Document-82787/IC_recent%20results_ ARENA_18_ seckel.pdf

Physics Potential of a Radio Surface Array at the South Pole (IceCube-Gen2 collaboration, Frank Schröder et al.), ARENA 2018, docushare.icecube.wisc.edu/dsweb/ Get/Document-82786/Schroeder%20slides.pdf; astro-ph.IM/1811.00599

Recent Highlights from the IceCube Neutrino Laboratory (IceCube Collaboration, Justin Vandenbroucke et al.), 11th Cosmic Ray Intl. Seminar (CRIS 2018), Portopalo di Capo Passero, Italy, docushare.icecube.wisc.edu/dsweb/Get/Document-82825/ vandenbroucke_slides.pdf

Observing Stratospheric Temperature Variations at South Pole with High-Energy Muons in IceCube (IceCube Collaboration, Serap Tilav et al.), Scientific Committee on Antarctic Research (POLAR 2018), Davos, Switzerland, docushare.wipac.wisc.edu/ dsweb/Get/Document-82788/MuonRate-and-Atmosphere-POLAR2018.pdf

The IceCube Neutrino Observatory as an Instrument for Glaciology (IceCube Collaboration, Martin Rongen et al.), POLAR 2018, docushare.icecube.wisc.edu/dsweb/ Get/Document-82806/Rongen%20slides%20(1).pdf

IceCube: Neutrino Window on the Universe (IceCube Collaboration, Jenni Adams et al), POLAR 2018, docushare.wipac.wisc.edu/dsweb/Get/Document-68339/polar_ 2018_ adams.pdf

Cosmic Ray & Air Shower Studies with IceCube (IceCube Collaboration, Javier Gonzalez et al), POLAR 2018, docushare.icecube.wisc.edu/dsweb/Get/Document-82807/jgonzalez_polar2018 _slides.pdf

Neutrino Point-Source Searches in IceCube Using a Multi-Messenger Approach (IceCube Collaboration, Imen Al Samarai et al) [poster], POLAR 2018, Davos, Switzerland, docushare.icecube.wisc.edu/dsweb/Get/Document-82793/Al%20Samarai% 20poster.pdf

Optical Modules for the Next-Generation Neutrino Telescope at the South Pole (IceCube-Gen2 collaboration, Lew Classen et al), POLAR 2018.

Radio Frequency and Optical Measurements of the Glacial Ice at the South Pole (IceCube Collaboration, Michael DuVernois et al), POLAR 2018.

Improving Reconstruction of GeV-Scale Neutrinos in IceCube/DeepCore by Direct Event Simulation (poster) (IceCube Collaboration, Sarah Nowicki et al.), Canadian Association of Physicists Congress, Halifax (2018) *to be published in* Physics in Canada; indico.cern.ch/ event/687532/contributions/2956747/

Highlights from the IceCube Collaboration: From Astrophysics to Dark Matter (IceCube Collaboration, JuanAn Aguilar et al.), Exploring the Dark Side of the Universe (EDSU2018), Guadeloupe, PoS 0128

Conference Presentations and Proceedings

Search for High-Energy Neutrinos from Binary Neutron Star Mergers (IceCube Collaboration, Nora Linn Strotjohann et al.), 15th Marcel Grossman Meeting (MG15), Rome, Italy (2018); astro-ph.HE/1903.09648

Latest Results from IceCube (IceCube Collaboration, Chad Finley et al.), MG15; docushare.icecube.wisc.edu/dsweb/Get/Document-82844/Finley_slides.pdf

Combined Search for Dark Matter in the Galactic Center with ANTARES and IceCube (IceCube and ANTARES collaborations, Christoph Tönnis et al.), XXXIX Intl. Conf. on High Energy Physics (ICHEP 2018), Seoul, Korea, PoS; docushare.icecube.wisc.edu/ dsweb/Get/Document-85582/ANTARES%20IC%20DM%20proc.pdf

A Search for Secluded Dark Matter in the Sun Using the IceCube Neutrino Telescope (IceCube Collaboration, Christoph Tönnis et al.), [poster], ICHEP 2018; docushare.icecube.wisc.edu/ dsweb/Get/Document-85581/Toennis%20proceeding.pdf

Search for Solar Atmospheric Neutrinos with the IceCube Neutrino Telescope (IceCube Collaboration, Jin In et al.), ICHEP 2018; docushare.icecube.wisc.edu/dsweb/Get/Document-82845/Jin_slides.pdf

Neutrino and Beyond Standard Model Physics with IceCube (IceCube Collaboration, Anna Pollmann et al.), 7th Intl. Conf. on New Frontiers in Physics (ICNFP2018), Kolymbari, Greece; docushare.icecube.wisc.edu/dsweb/Get/Document-82846/Pollmann% 20slides.pdf

IceCube Searches for Magnetic Monopoles (IceCube Collaboration, Anna Pollmann et al.), ICNFP2018; docushare.icecube.wisc.edu/dsweb/Get/Document-85507/Pollmann%20 proceedings.pdf

Simulation Study for the IceTop Enhancement with a Scintillator Array (IceCube-Gen2 collaboration, Agnieszka Leszczyńska et al), Proc. of 26th Extended European Cosmic Ray Symposium, Barnal-Belokurikha, Russia (2018); J. Phys. Conf. Ser. **1181** 012076 (2019).

Latest Results from IceCube and the Status of Future Astrophysical Neutrino Experiments (IceCube Collaboration, Erin O'Sullivan et al.), 16th Conf. on Flavor Physics & CP Violation (FPCP2018), Hyderabad, India; docushare.icecube.wisc.edu/ dsweb/Get/Document-82889/ OSullivan%20slides.pdf

Multi-messenger Astronomy with High-Energy Neutrinos (IceCube Collaboration, Anna Franckowiak et al.), Passion for Physics 2018, Lake Como, Italy; docushare.icecube.wisc.edu/dsweb/Get/Document-82866/Franckowiak_slides.pdf

New Results from IceCube and Future Prospects (IceCube Collaboration, Erik Blaufuss et al.), Int'l Symposium on Neutrino Frontiers, Quy Nhon, Vietnam (2018); indico.in2p3.fr/event/ 17344/contributions/61535/attachments/49315/62611/Vietnam-NeutrinoFrontiers.pdf

Studies on Dark Rates Induced by Radioactive Decays in the Multi-PMT Digital Optical Module (IceCube Collaboration, Martin Unland et al.), New and Enhanced Photosensor Technologies for Underground/underwater Neutrino Experiments (NEPTUNE 2018), Napoli, Italy; docushare.icecube.wisc.edu/dsweb/Get/Document-82871/Unland%20slides.pdf

A Multi-PMT Optical Module for the South Pole (IceCube Collaboration, Alexander Kappes et al.), NEPTUNE 2018; docushare.icecube.wisc.edu/dsweb/Get/Document-82886/Kappes%20 mDOM%20slides.pdf

Status and Prospects for the IceCube Neutrino Observatory (IceCube-Gen 2 collaboration, Dawn Williams et al.), 10th Intl. Workshop on Ring Imaging Cherenkov Detectors, Moscow, Russia (RICH 2018), Nucl. Instrum. Meth. A **952** (2020), 161650; DOI: 10.1016/j.nima.2018.11.109.

High Energy Neutrino Astronomy with IceCube at the South Pole (IceCube Collaboration, Sally Robertson et al.), 46th SLAC Summer Institute, Menlo Park, California (2018); indico.cern.ch/ event/701949/contributions/3060148/ attachments/ 1697620/2732855/SLAC_2018.pdf

Recent Particle Physics Results from IceCube (IceCube Collaboration, Carlos Argüelles et al.), 20th Intl. Workshop on Neutrinos from Accelerators (NuFACT 2018), Blacksburg, Virginia; indico.phys.vt.edu/ event/34/contributions/613/

Searching Transient Neutrino Sources with IceCube: Status and Results (IceCube Collaboration, Thomas Kintscher et al.), 14th Rencontres du Vietnam, Quy Nhon, Vietnam (2018); docushare.icecube.wisc.edu/dsweb/View/Collection-15227/Document-82962

Search for Heavy Dark Matter with IceCube (IceCube Collaboration, Hrvoje Dujmović et al.), 22nd Intl. Conf. on Particle Physics & Cosmology (COSMO18), Daejeon, Korea (2018); docushare.icecube.wisc.edu/dsweb/Get/Document-85077/Dujmovic%20slides.pdf

Multimessenger Astronomy with Neutrinos at the South Pole: IceCube and Future Observations in the Ice (IceCube Collaboration, Kael Hanson et al.), COSMO18; docushare.icecube. wisc.edu/dsweb/Get/Document-85081/Hanson%20slides.pdf

IceCube Upgrade and Gen2 (IceCube Collaboration, Summer Blot et al.), TeV Astroparticle Physics (TeVPA 2018), Berlin, Germany; indico.desy.de/indico/ event/18204/session/14/ contribution/264

Recent Results from IceCube (IceCube Collaboration, Joshua Wood, et al.), TeVPA 2018; indico.desy.de/indico/event/18204/session/14/contribution/329

Measurements of Neutrino Oscillations with IceCube (IceCube Collaboration, Ty DeYoung, et al.), TeVPA 2018; indico.desy.de/indico/event/18204/session/14/contribution/240

Dissecting the Region around IceCube-170922A (IceCube Collaboration, Theo Glauch, et al.), TeVPA 2018; indico.desy.de/indico/event/18204/contributions

Improving the Directional Reconstruction of PeV Hadronic Cascades in IceCube [poster] (IceCube Collaboration, Christian Haack, et al.), TeVPA 2018; indico.desy.de/indico/ event/ 18204/contributions

Results of IceCube Searches for Neutrinos from Blazars Using 8 Years of Through-Going Muon Data from the Northern Hemisphere (IceCube Collaboration, Matthias Huber, et al.), TeVPA 2018; indico.desy.de/indico/event/18204/session/14/contribution/91

Conference Presentations and Proceedings

Cosmic Ray Spectrum and Mass Composition from IceTop and IceCube (IceCube Collaboration, Matthias Plum, et al.), TeVPA 2018; indico.desy.de/indico/event/18204/ contributions

Gamma-Ray Lightcurve Corelation Search for IceCube Neutrinos from TXS 0506+056 & Cumulative Search from Blazar Flares (IceCube Collaboration, Christoph Raab, et al.), TeVPA 2018; indico.desy.de/indico/event/18204/session/14/contribution/222

Searching for Optical Counterparts to High-Energy Neutrino Sources with the Zwicky Transient Facility (IceCube Collaboration, Ludwig Rauch, et al.), TeVPA 2018; indico.desy.de/indico/ event/18204/session/14/contribution/125

Diffuse Neutrino Measurements with IceCube High Energy Starting Events (IceCube Collaboration, Austin Schneider, et al.), TeVPA 2018; indico.desy.de/indico/event/18204/ session/14/contribution/146

New Measurement of the Flavor Composition of High-Energy Neutrino Events with Contained Vertices in IceCube (IceCube Collaboration, Juliana Stachurska, et al.), TeVPA 2018; indico.desy.de/indico/event/18204/session/14/contribution/221

Probing the Tidal Disruption of Stars by Supermassive Black Holes with the IceCube Neutrino Observatory (IceCube Collaboration, Robert Stein, et al.), TeVPA 2018; indico.desy.de/indico/ event/18204/session/17/contribution/166

IceCube Search for Galactic Neutrino Sources Based on HAWC Observations of the Galactic Plane (IceCube Collaboration, Joshua Wood, et al.), TeVPA 2018; indico.desy.de/indico/event/ 18204/session/14/contribution/270

All-Sky Search for Transient Neutrino Sources with IceCube in Real-Time (IceCube Collaboration, Thomas Kintscher, et al.), TeVPA 2018; indico.desy.de/indico/event/18204/ session/17/contribution/234

Searches of New Physics with >TeV Neutrinos in IceCube (IceCube Collaboration, Carlos Argüelles, et al.), TeVPA 2018; indico.desy.de/indico/event/18204/session/8/ contribution/162

Search for Neutrinos from the Blazar TXS 0506+056 Using 10 Years of IceCube Data (IceCube Collaboration, Imen Al Samarai, et al.), TeVPA 2018; indico.desy.de/indico/ event/18204/ session/14/contribution/310

Search for Correlations of Ultra–High-Energy Cosmic Rays and High-Energy Neutrinos (IceCube Collaboration, Lisa Schumacher, et al.), TeVPA 2018; indico.desy.de/indico/ event/18204/session/24/contribution/123

Status of Dark Matter Searches with IceCube (IceCube Collaboration, Carlos de los Heros, et al.), TeVPA 2018; indico.desy.de/indico/event/18204/session/12/contribution/29

The IceCube Enhanced Starting Track Event Selection and RealTime Stream [poster] (IceCube Collaboration, Sarah Mancina, et al.), TeVPA 2018; indico.desy.de/indico/ event/18204/session/ 17/contribution/160

Scintillator Upgrade of IceTop: An Extension of the IceCube Surface Detector Array (IceCube-Gen2 collaboration, Thomas Huber, et al.), TeVPA 2018; indico.desy.de/ indico/ event/18204/ session/17/contribution/236

Detection of a Flaring Blazar Coincident with an IceCube High-Energy Neutrino (IceCube, Fermi & MAGIC collaborations, Anna Franckowiak, et al.), TeVPA 2018; indico.desy.de/indico/ event/18204/session/14/contribution/187

Recent Results on Particle Physics and Astrophysics from IceCube (IceCube Collaboration, Aya Ishihara, et al.), XLVI Intl. Symposium on Multiparticle Dynamics (ISMD2018), Singapore; docushare.icecube.wisc.edu/dsweb/Get/Document-85015/ Ishihara_slides.pdf

Multi-Messenger Astronomy with High-Energy Neutrinos (IceCube Collaboration, Anna Franckowiak, et al.), Invisibles 2018 Workshop, Karlsruhe, Germany; docushare. icecube.wisc.edu/dsweb/Get/Document-85017/Franckowiak_slides.pdf

IceCube Upgrades and Gen2 (IceCube Collaboration, Summer Blot, et al.), 7th Roma Intl. Conf. on AstroParticle Physics (RICAP-18), Rome, Italy; docushare.icecube. wisc.edu/dsweb/ Get/Document-85007/ICU&Gen2_SBlot_RICAP2018.pdf

Ultra–High-Energy Neutrinos (IceCube Collaboration, James Madsen, et al.), XXXVIII Physics in Collision, Bogota, Colombia (2018); astro-ph.HE/1901.02528

Atmospheric Neutrino Oscillations with IceCube (IceCube Collaboration, Andrii Terliuk, et al.), Proc. of Neutrino Oscillation Workshop (NOW2018), Ostuni, Italy; PoS 007

IceCube, DeepCore and Beyond (IceCube Collaboration, Juan Pablo Yáñez, et al.), European Workshop on Water Cherenkov Precision Detectors for Neutrino and Nucleon Decay Physics (TMEX 2018), Warsaw, Poland; events.ncbj.gov.pl/event/2/ contributions/249/

IceCube Construction and Ice Quality (IceCube Collaboration, Juan Pablo Yáñez, et al.), TMEX 2018; events.ncbj.gov.pl/event/2/contributions/263/

IceCube: Astrophysics Results (IceCube Collaboration, Thomas Kintscher, et al.), TMEX 2018; events.ncbj.gov.pl/event/2/contributions/271/

Event Reconstruction Methods in IceCube (IceCube Collaboration, Mirco Hünnefeld, et al.), TMEX 2018; events.ncbj.gov.pl/event/2/contributions/238/

Tau Neutrinos in IceCube, KM3NeT & Pierre Auger (IceCube Collaboration, Daan van Eijk et al.), 15th Intl. Workshop on Tau Lepton Physics, Amsterdam; docushare.icecube. wisc.edu/ dsweb/Get/Document-85074/VanEijk%20Slides.pdf

IceCube: An Overview of Physics Results (IceCube Collaboration, Ignacio Taboada, et al.), Proc. of the 8th Intl. Workshop on Very Large Volume Neutrino Telescopes (VLVnT 2018), Dubna, Russia; EPJ Web of Confs. **2017** 01002 (2019).

Searching for Optical Counterparts to High-Energy Neutrino Sources with the Zwicky Transient Facility (IceCube Collaboration, Ludwig Rauch, et al.), VLVnT 2018; docushare.icecube.wisc. edu/dsweb/Get/Document-85080/Rauch%20slides.pdf

The Multi-PMT Optical Module for the IceCube Upgrade (IceCube Collaboration, Alexander Kappes, et al.), VLVnT 2018; docushare.icecube.wisc.edu/dsweb/Get/Document-85539/%20Kappes%20combined%20proceedings.pdf

Detection of a Flaring Blazar Coincident with an IceCube High-Energy Neutrino (IceCube & Fermi collaborations, Anna Franckowiak, et al.), VLVnT 2018; EPJ Web of Confs. **2017** 02001 (2019).

IceCube RealTime Program (IceCube Collaboration, Anna Franckowiak, et al.), VLVnT 2018; docushare.icecube.wisc.edu/dsweb/Get/Document-85079/RealTime%20slides.pdf

Improving Muon Track Reconstruction of IceCube and IceCube-Gen2 (IceCube Collaboration, Federica Bradascio, et al.), VLVnT 2018; EPJ Web of Confs. **2017** 05002 (2019).

IceCube High-Energy Starting Events at 7.5 Years – New Measurements of Flux and Flavor (IceCube Collaboration, Juliana Stachurska, et al.), VLVnT 2018; EPJ Web of Confs. **2017** 02005 (2019).

Improving the Directional Reconstruction of PeV Hadronic Cascades in IceCube (IceCube Collaboration, Christian Haack, et al.), VLVnT 2018; EPJ Web of Confs. **2017** 05003 (2019).

Joint Constraints on Galactic Diffuse Neutrino Emission with ANTARES and IceCube (ANTARES and IceCube collaborations, Christian Haack, et al.), VLVnT 2018; docushare.icecube.wisc.edu/dsweb/Get/Document-85073/Haack%20slides.pdf

Indirect Searches for Dark Matter with IceCube (IceCube Collaboration, Juan Antonio Aguilar Sanchez, et al.), VLVnT 2018; EPJ Web of Confs. **2017** 04006 (2019).

Search for Correlations of High-Energy Neutrinos and Ultra–High-Energy Cosmic Rays, (ANTARES, IceCube, Pierre Auger & Telescope Array collaborations, Lisa Schumacher, et al.), VLVnT 2018; EPJ Web of Confs. **2017** 02010 (2019).

Searches for IceCube Neutrinos from Blazar Flares Using Correlations with γ-Ray Lightcurves (IceCube Collaboration, Christoph Raab, et al.), VLVnT 2018; EPJ Web of Confs. **2017** 02007 (2019).

D-Egg: A Next-Generation Optical Module for IceCube (IceCube-Gen2 collaboration, Yuya Makino, et al.), VLVnT 2018; EPJ Web of Confs. **2017** 06005 (2019).

Reconstruction Techniques in IceCube Using Convolutional and Generative Neural Networks (IceCube Collaboration, Mirco Hünnefeld, et al.), VLVnT 2018; EPJ Web of Confs. **2017** 05005 (2019).

Deconvolution in Measurements of Muon Neutrino Energy Spectra with IceCube (IceCube Collaboration, Tim Ruhe, et al.), VLVnT 2018; EPJ Web of Confs. **2017** 05006 (2019).
The Multi-PMT Optical Module for the IceCube Upgrade (IceCube Collaboration, Lew Classen, et al.), VLVnT 2018; EPJ Web of Confs. **2017** 06004 (2019).

Search for Astrophysical Tau Neutrinos Using IceCube Waveforms (IceCube Collaboration, Donglian Xu, et al.), VLVnT 2018; docushare.icecube.wisc.edu/ dsweb/Get/Document-85175/DXu%20slides.pdf

Oscillation Physics with DeepCore and the IceCube Upgrade (IceCube Collaboration, Joshua Hignight, et al.), VLVnT 2018; docushare.icecube.wisc.edu/dsweb/Get/Document-85085/ Hignight%20slides.pdf

Constraints on UHECR Sources with 9 Years of IceCube EHE Data (IceCube Collaboration, Aya Ishihara, et al.), VLVnT 2018; docushare.icecube.wisc.edu/dsweb/ Get/Document-85091/Ishihara %20slides.pdf

Neutrinos from TXS 0506+056 Prior to the 2017 Gamma-Ray Flare (IceCube Collaboration, Chad Finley, et al.), VLVnT 2018; EPJ Web of Confs. **2017** 02002 (2019).

IceCube Results on Magnetic Monopoles (IceCube Collaboration, Christian Spiering, et al.), VLVnT 2018; docushare.icecube.wisc.edu/dsweb/Get/Document-85169/Spiering-Pollman% 20slides %20.pdf

IceCube Sterile Neutrino Searches (IceCube Collaboration, BJP Jones, et al.), VLVnT 2018; EPJ Web of Confs. **2017** 04005 (2019), hep-ex/1902.06185.

Next Generation Neutrino Detectors at the South Pole (IceCube Collaboration, Marek Kowalski, et al.), VLVnT 2018; EPJ Web of Confs. **2017** 01005 (2019).

ANTARES-IceCube Combined Search for Neutrino Point Sources in the Southern Hemisphere (ANTARES and IceCube collaborations, Giulia Illuminati et al.), VLVnT 2018; EPJ Web of Confs. **2017** 02008 (2019).

Combined Search for Dark Matter from the Galactic Centre with the ANTARES and IceCube Neutrino Telescopes (ANTARES and IceCube collaborations, Sara Rebecca Gozzini, et al.), VLVnT 2018; EPJ Web of Confs. **2017** 04007 (2019).

Atmospheric Muons Measured with IceCube (IceCube Collaboration, Dennis Soldin, et al.), Proc. of Ultra High Energy Cosmic Rays 2018 (UHECR 2018), Paris, France; docushare.icecube.wisc.edu/ dsweb/Get/Document-85172/muons_in_IceCube_soldin.pdf

Report on Tests and Measurements of Hadronic Interaction Properties with Air Showers (EAS-MSU, IceCube, KASCADE-Grande, NEVOD-DÉCOR, Auger, SUGAR, Telescope Array and Yakutsk EAS Array collaborations, H.P. Dembinski et al.), UHECR 2018; hep-ex/ 1902.08124

Search for a Correlation between UHECRs Measured by the Pierre Auger Observatory and the Telescope Array and the Neutrino Candidate Events from IceCube and ANTARES (ANTARES, IceCube, Auger and Telescope Array collaborations, J. Aublin et al.), UHECR 2018; astro-ph.HE/1905.03997

Latest Cosmic Ray Results from IceTop & IceCube (IceCube Collaboration, Karen Andeen, et al.), UHECR 2018; docushare.icecube.wisc.edu/dsweb/Get/Document-85682/Andeen%20 proceedings.pdf

A Scintillator and Radio Enhancement of the IceCube Surface Detector Array (IceCube Collaboration, Andreas Haungs, et al.), UHECR 2018; astro-ph.IM/1903.04117

Conference Presentations and Proceedings

IceCube Recent Results: Hint of First Glashow Resonance & the Possible First Neutrino Source (IceCube Collaboration, Lu Lu, et al.), UHECR 2018; docushare.icecube.wisc.edu/ dsweb/Get/ Document-85226/Lu%20slides.pdf

Realtime Multi-Messenger Astronomy on IceCube (IceCube Collaboration, Alex Olivas, et al.), Deep Learning for Multimessenger Astrophysics, Urbana, Illinois (2018); docushare.icecube.wisc.edu/dsweb/Get/Document-86648/Realtime%20Multi-Messenger% 20Astronomy%20on%20IceCube.pdf

Astro and Particle Physics with IceCube (IceCube Collaboration, Tom Stuttard, et al.), 4th Intl. Conf. on Particle Physics and Astrophysics (ICPPA 2018), Moscow, Russia; docushare. icecube.wisc.edu/dsweb/Get/Document-85195/IceCube_TomStuttard_ICPPA2018-compressed.pdf

Environmental Decoherence in Atmospheric Neutrinos with IceCube (IceCube Collaboration, Tom Stuttard, et al.), ICPPA 2018; docushare.icecube.wisc.edu/ dsweb/Get/Document-85227/Stuttard%20poster.pdf

Reconstruction of the Spectrum of Cascades Generated by VHE Muons in IceCube (IceCube Collaboration, Semyon Khokhlov, et al.), ICPPA 2018; docushare.icecube. wisc.edu/dsweb/Get/ Document-85447/ICPPA2018_proceeding_Khokhlov.pdf

Recent Results from IceCube (IceCube Collaboration, Thorsten Glüsenkamp, et al.), Cosmology 2018, Dubrovnik, Croatia; docushare.icecube.wisc.edu/dsweb/Get/Document-85194/Thorsten% 20slides.pdf

The IceCube Detector Systems: Current Status and Future Plans (IceCube Collaboration, John Kelley et al.), 19th Intl. Workshop on Next Generation Nucleon Decay and Neutrino Detectors (NNN18), Vancouver, British Columbia, Canada; meetings.triumf.ca/indico/event/27/ session/2/contribution/66

Latest (Selected) Results from IceCube (IceCube Collaboration, Joanna Kiryluk et al.), NNN18; meetings.triumf.ca/indico/event/27/session/5/contribution/9

IceCube Gen2 and IceCube Upgrade (IceCube-Gen2 collaboration, Joshua Hignight et al.), NNN18; meetings.triumf.ca/indico/event/27/session/5/contribution/26

Latest Cosmic Ray Results from IceTop and IceCube (IceCube Collaboration, Matthias Plum et al.), Searching for the Sources of Galactic Cosmic Rays, Paris, France (2018); docushare.icecube.wisc.edu/dsweb/View/Collection-15437/Document-85448

Astrophysical Neutrinos with IceCube (IceCube Collaboration, Tim Ruhe et al.), PHYSTAT-nu Workshop 2019, CERN, Switzerland; indico.cern.ch/event/735431/ contributions/3137798/

Neutrino Oscillation Physics with IceCube (IceCube Collaboration, Justin Evans et al.), Rencontres de Moriond, *Electroweak Interactions and Unified Theories*, La Thiule, Vallée d'Aosta, Italy; docushare.icecube.wisc.edu/dsweb/Get/Document-86171/2019-03-Moriond.pdf

IceCube: Opening a New Window on the Universe from the South Pole (IceCube Collaboration, Teresa Montaruli et al.), La Thiule 2019, Rencontres de Physique de la Vallé d'Aosta, docushare.icecube.wisc.edu/dsweb/Get/Document-86683/Montaruli% 20slides.pdf

Conference Presentations and Proceedings

Correlation of IceCube Neutrinos with 2MASS Redshift Survey (IceCube Collaboration, Stephen Sclafani, et al.), New Era of Multi-Messenger Astrophysics (Asterics 2019), Groningen, Netherlands; docushare.icecube.wisc.edu/dsweb/Get/Document-86592/ 2MRS_Asterics_2019_linno.pdf

Multi-Messenger Astronomy in the Era of the Zwicky Transient Facility (ZTF) (IceCube Collaboration, Ludwig Rauch, et al.), Asterics 2019; docushare.icecube.wisc.edu/dsweb/ Get/Document-86677/rauch_slides.pdf

Search for High-Energy Neutrinos from Populations of Optical Transients (IceCube Collaboration, Robert Stein, et al.), Asterics 2019; docushare.icecube.wisc.edu/dsweb/ Get/Document-86676/Stein%20Proceedings.pdf

Sources of Astrophysical Neutrinos (IceCube Collaboration, Ali Kheirandish et al.), XVIII Intl. Workshop on Neutrino Telescopes, Venice, Italy (NeuTel 2019); docushare. icecube.wisc.edu/dsweb/ Get/Document-86335/Kheirandish%20slides.pdf

Neutrino Point-Source Searches with 10 years of IceCube Data (IceCube Collaboration, Tessa Carver et al.), NeuTel 2019; docushare.icecube.wisc.edu/dsweb/Get/Document-86363/ Carver%20slides.pdf

Particle Physics with IceCube (IceCube Collaboration, Carlos de los Heros et al.), NeuTel 2019; docushare.icecube.wisc.edu/dsweb/Get/Document-86331/delosheros_slides.pdf

Astrophysical Neutrinos – Recent Results from IceCube (IceCube Collaboration, Chad Finley et al.), NeuTel 2019; docushare.icecube.wisc.edu/dsweb/Get/Document-86332/ Finley_slides.pdf

Diffuse High-Energy Neutrino Fluxes Results from IceCube (IceCube Collaboration, Hans Niederhausen et al.), NeuTel 2019; docushare.icecube.wisc.edu/dsweb/Get/Document-86362/ Niederhausend%20slides.pdf

Realtime and Multimessenger Programs Using IceCube (IceCube Collaboration, Mike Richman et al.), NeuTel 2019; docushare.icecube.wisc.edu/dsweb/Get/Document-86671/ Richman%20slides.pdf

Test of Lorentz Violation with Astrophysical Neutrino Flavor in IceCube (IceCube Collaboration, Teppei Katori et al.), 8th Meeting on CPT and Lorentz Symmetry (CPT'19), Bloomington, Indiana; docushare.icecube.wisc.edu/dsweb/Get/Document-86696/Katori%20proceedings.pdf

Search for Lorentz Violation Using High-Energy Atmospheric Neutrinos in IceCube (IceCube Collaboration, Carlos Argüelles et al.), CPT'19; docushare.icecube.wisc.edu/ dsweb/Get/Document-86697/Arguelles%20proceeding.pdf

Highlights from the Seven-Year High-Energy Starting Events Sample in IceCube (IceCube Collaboration, Kareem Farrag et al.), CPT'19; docushare.icecube.wisc.edu/dsweb/Get/ Document-86698/Farrag_proceedings.pdf

Search for Dark Matter with the IceCube Neutrino Telescope (IceCube Collaboration, Juan Antonio Aguilar et al.), Blois 2019: 31st Rencontres on Particle Physics and Cosmology, Blois, France; indico.cern.ch/event/767069/contributions/3410953/

Cosmic Tau Neutrinos and the Astrophysical Neutrino Flavor Composition (IceCube Collaboration, Juliana Stachurska et al.), Blois 2019; docushare.icecube.wisc.edu/ dsweb/Get/Document-86652/Stachurska%20slides.pdf

What Will the Largest Neutrino Telescopes Tell Us about Solar Flares? (IceCube Collaboration, Gwen De Wasseige et al.), Blois 2019; docushare.icecube.wisc.edu/ dsweb/Get/Document-86651/DeWasseige%20slides.pdf

Status of Neutrino Oscillation Measurement with IceCube DeepCore (poster) (IceCube Collaboration, Juan Pablo Yañez et al.), 27th Intl. Workshop on Weak Interactions and Neutrinos (WIN2019), Bari, Italy; docushare.icecube.wisc.edu/dsweb/Get/Document-86654/yanez_ poster.pdf

IceCube Supernova Detection and Contributions to SNEWS 2.0 (IceCube Collaboration, Spencer Griswold et al.), Supernova Neutrinos in the Multi-Messenger Era, Sudbury, Canada (2019); indico.cern.ch/event/800827/contributions/3429830/attachments/1863048/ 3062538/IceCube_SN_Detection_and_SNEWS.pdf

Time-Dependent Search for Neutrino Emission from Binary Sources @ IceCube (poster) (IceCube Collaboration, Qinrui Liu et al.), Invisibles 19 Workshop, Valencia, Spain; docushare.icecube.wisc.edu/dsweb/Get/Document-86713/poster_qliu_invisible.pdf

The IceCube Upgrade (IceCube Collaboration, Delia Tosi et al.), 5th Workshop of the SCAR Astronomy and Astrophysics from Antarctica (ScarAAA2019), Mont Blanc, Switzerland; docushare.icecube.wisc.edu/dsweb/Get/Document-86650/IceCubeUpgrade_v2.pdf

Recent Results from the IceCube Neutrino Observatory (IceCube Collaboration, Jim Madsen et al.), ScarAAA2019; docushare.icecube.wisc.edu/dsweb/Get/Document-86625/ IceCubeResults_SCAR_AAA_2019_final.pdf

Recent IceCube Measurements Using High-Energy Neutrinos (IceCube Collaboration, Hans Niederhausen et al.), 18th Conf. on Elastic and Diffractive Scattering (EDS Blois 2019), Quy Nhon, Vietnam; docushare.icecube.wisc.edu/dsweb/Get/Document-86714/ Niederhausen%20slides.pdf

Searching for the Galactic Sources of High-Energy Neutrinos (IceCube Collaboration, Ali Kheirandish et al.), IGC@25: Multimessenger Universe, State College, Pennsylvania (2019); docushare.icecube.wisc.edu/dsweb/Get/Document-86715/Kheirandish%20slides.pdf

Cosmic-Ray Composition and Spectrum from 3 PeV to 1 EeV Using the IceCube and IceTop Detectors (IceCube Collaboration, Katherine Rawlins et al.), Intl. Symposium on Cosmic Rays and Astrophysics (ISCRA 2019), Moscow, Russia; docushare. icecube.wisc.edu/dsweb/Get/Document-86656/iscra_composition_v3.pdf

Measurements of Cosmic-Ray Muon Distributions with IceTop and IceCube (IceCube Collaboration, Katherine Rawlins et al.), ISCRA 2019; docushare.icecube.wisc.edu/ dsweb/Get/Document-86655/iscra_muons_v3.pdf

Expected Spectra of Muon-Induced Cascades in IceCube (IceCube Collaboration, Semyon Khokhlov et al.), ISCRA 2019; docushare.icecube.wisc.edu/dsweb/Get/ Document-86672/proceedings_Khokhlov.pdf

High-Energy Neutrino Astronomy: Current Status and Prospects (IceCube Collaboration, Gwenhaël de Wasseige et al.), European Physics Society Conf. on High-Energy Physics (EPS HEP 2019), Ghent, Belgium, PoS EPS-HEP2019 (2020), 042; docushare.icecube.wisc.edu/dsweb/Get/ Document-87087/ de%20Wasseige%20HE%20nu%20slides.pdf

Detection of a Neutrino Event at the Glashow Resonance Energy in IceCube (IceCube Collaboration, Christian Haack et al.), EPS HEP 2019; indico.cern.ch/event/577856/ contributions/3422129/

Neutrino Oscillations in IceCube (IceCube Collaboration, Christian Haack et al.), EPS HEP 2019; indico.cern.ch/event/577856/contributions/3457522/

IceCube's Latest and IceCube-Gen2 Prospectives (IceCube Collaboration, Alessio Porcelli et al.), 15th Intl. Conf. on the Dark Side of the Universe, Buenos Aires, Argentina (2019); docushare.icecube.wisc.edu/dsweb/Get/Document-87091/Porcelli%20slides.pdf

Results and Highlights from IceCube (IceCube Collaboration, Tianlu Yuan et al.), Precision Investigations of the Neutrino Sector, Menlo Park, California (2019); docushare.icecube.wisc.edu/dsweb/Get/Document-86787/pins19.pdf

Cosmic Neutrinos and the Cosmic-Ray Accelerator TXS 0506+056, 36th International Cosmic Ray Conference, Madison, WI (2019); astro-ph.HE/1909.09468.

Neutrino oscillations and PMNS unitarity with IceCube/DeepCore and the IceCube Upgrade (IceCube Collaboration, Tom Stuttard et al.), PoS NuFact2019 099 (2020); DOI: 10.22323/1.369.0099.

Probing Beyond Standard Model Physics via Oscillations with IceCube DeepCore (IceCube Collaboration, S. Blot et al.), J. Phys. Conf. Ser. **1468** 1 012168 (2020); DOi: 10.1088/1742-6596/1468/1/012168.

D-Egg: new optical sensors for the IceCube Upgrade and Gen2 (IceCube Collaboration, Aya Ishihara et al.), J. Phys. Conf. Ser. **1468** 1 012166 (2020); DOI: 10.1088/1742-6596/1468/1/012166.

Physics Potential of the IceCube Upgrade (IceCube Collaboration, Wing Yan Ma et al.), J. Phys. Conf. Ser. **1468** 1, 012169 (2020); DOI: 10.1088/1742-6596/1468/1/012169.

Status of standard oscillation physics with IceCube DeepCore (IceCube Collaboration, J.P. Yanez et al.), J. Phys. Conf. Ser. **1468** 1 012122 (2020); DOi: 10.1088/1742-6596/1468/1/012122.

Search for Dark Matter and BSM Physics with the IceCube Neutrino Observatory (IceCube Collaboration, Aguilar Sanchez et al.), PoS NuFact2019 11 (2020); DOI: 10.22323/1.369.0110.

IceCube Search for Galactic Neutrino Sources based on Very High Energy γ-ray Observations (IceCube and HAWC Collaborations, Ali Kheirandish et al.), J. Phys. Conf. Ser. **1468** 1 012081 (2020); DOI: 10.1088/1742-6596/1468/1/012081.

High-energy particle physics with IceCube (IceCube Collaboration, Tianlu Yuan et al.), J. Phys. Conf. Ser. **1468** 1 012140 (2020); DOI: 10.1088/1742-6596/1468/1/012140.

Indirect Dark Matter Searches with IceCube (IceCube Collaboration, Morten Medici et al.), J. Phys. Conf. Ser. **1342** 1 012074 (2020); DOI: 10.1088/1742-6596/1342/1/012074.

Testing the Neutrino Mass Ordering with Four Years of IceCube/DeepCore Data (IceCube Collaboration, Martin Leuermann et al.), J. Phys. Conf. Ser. **1342** 1 012030 (2020); DOI: 10.1088/1742-6596/1342/1/012030.

Searches for Dark Matter with the IceCube neutrino telescope (IceCube Collaboration with S. Baur), NDM-2020 (2020); DOI: 10.31526/ACP.NDM-2020.4.

The Forward Physics Facility: Sites, Experiments, and Physics Potential (with L. Anchordoqui et al.), Phys.Rept. 968 (2022) 1-50; arXiv:2109.10905.

The Observation of High-Energy Neutrinos from the Cosmos: Lessons Learned for Multimessenger Astronomy, the 16th Marcel Grossmann Meeting (2021); arXiv:2110.01687.

The IceCube-Gen2 Neutrino Observatory (IceCube-Gen2 Collaboration), JINST **16** (2021) C10007; DOI: 10.1088/1748-0221/16/10/C10007.

Evolution of the IceCube data acquisition (IceCube-Gen2 Collaboration, J. Kelley et al.), JINST **16** (2021) C09017; DOI: 10.1088/1748-0221/16/09/C09017.

Direction reconstruction using a CNN for GeV-scale neutrinos in IceCube (IceCube Collaboration, Yu et al), JINST **16** 11 C11001 (2021); DOI: 10.1088/1748-0221/16/11/C11001.

A multi-PMT optical sensor for IceCube-Gen2 (IceCube Collaboration, Basu et al), JINST **16** 11 C11009 (2021); DOI: 10.1088/1748-0221/16/11/C11009.

Search for dark matter from the centre of the Earth with 8 years of IceCube data (IceCube Collaboration, Renzi et al), JINST **16** 11 C11012 (2021); DOI: 10.1088/1748-0221/16/11/C11012.

Low energy event classification in IceCube using boosted decision trees (IceCube Collaboration, Leonard DeHolton et al), JINST **16** 12 C12007 (2021); DOI: 10.1088/1748-0221/16/12/C12007.

A new and improved IceCube point source analysis (IceCube Collaboration, Bellenghi et al), JINST **16** 11 C11002 (2021); DOI: 10.1088/1748-0221/16/11/C11002.

Starting track events in IceCube (IceCube Collaboration with M. Silva), JINST **16** (2021) C09015; DOI: 10.1088/1748-0221/16/09/c09015.

Sensitivity of a search for eV-scale sterile neutrinos with 8 years of IceCube DeepCore data (IceCube Collaboration with A. Trettin), JINST **16** (2021) C09005; DOI: 10.1088/1748-0221/16/09/C09005.

Advances in IceCube ice modelling & what to expect from the Upgrade (IceCube Collaboration with M. Rongen and D. Chirkin), JINST **16** (2021) C09014; DOI: 10.1088/1748-0221/16/09/C09014.

Search for periodic neutrino emission from X-ray binaries (IceCube Collaboration with C. F. Tung); JINST **16** (2021) C09025; DOI: 10.1088/1748-0221/16/09/C09025.

Using convolutional neural networks to reconstruct energy of GeV scale IceCube neutrinos (IceCube Collaboration with J. Micallef), JINST **16** (2021) C09019; DOI: 10.1088/1748-0221/16/09/C09019.

Dark matter neutrino scattering in the galactic centre with IceCube (IceCube Collaboration, A. McMullen, A. Vincent, C. Arguelles, A. Schneider et al.), JINST 16 (2021) C08001; DOI: 10.1088/1748-0221/16/08/C08001.

Cosmic Ray Measurements with IceCube (IceCube Collaboration, Kolanoski et al), Acta Phys. Polon. Supp. **15** 3 1 (2022); DOI: 10.5506/APhysPolBSupp.15.3-A1.

Enhancement of the IceCube surface instrumentation by a hybrid radio and scintillation detector array (IceCube Collaboration, Shefali et al), PoS EPS-HEP2021 **055** (2022); DOI: 10.22323/1.398.0055.

Atmospheric Neutrino Oscillations with 8 years of data from IceCube DeepCore (IceCube Collaboration, Leonard DeHolton et al), PoS NuFact2021 **062** (2022); DOI: 10.22323/1.402.0062.

Neutrinos from near and far: Results from the IceCube Neutrino Observatory (IceCube Collaboration, Yuan et al), (2022); astro-ph.HE/2208.01226.

Cosmic Ray Measurement with IceCube and IceTop (IceCube Collaboration, Soldin et al), (2022); astro-ph.HE/2208.01911.

Dark matter searches in the center of the Milky Way with IceCube (IceCube Collaboration, Iovine et al), PoS ICHEP2022 **311** (2022); DOI: 10.22323/1.414.0311.

Selected results from IceCube (IceCube Collaboration, Montaruli et al), Proceedings of CRIS 2022 Conference (2022); astro-ph.HE/2211.01737.

Search for Heavy Neutral Lepton Production and Decay with the IceCube Neutrino Observatory (IceCube Collaboration, Fischer et al), PoS ICHEP2022 **190** (2022); DOI: 10.22323/1.414.0190.

Multiplicity of TeV muons in air showers detected with IceTop and IceCube (IceCube Collaboration, Verpoest et al), (2022); astro-ph.HE/2211.16970.

Cosmic-Ray Composition analysis at IceCube using Graph Neural Networks (IceCube Collaboration, Koundal et al), (2022); astro-ph.HE/2211.17198.

Detecting neutrinos in IceCube with Cherenkov light in the South Pole ice (IceCube Collaboration, Yuan et al), (2022); astro-ph.IM/2212.12142.

Non-standard neutrino interactions in IceCube (IceCube Collaboration, Abbasi et al), PoS EPS-HEP2021 245 (2022); DOI: 10.22323/1.398.0245.

Searching for High-Energy Neutrinos from Ultra-Luminous Infrared Galaxies with IceCube (IceCube Collaboration, Abbasi et al), PoS EPS-HEP2021 092 (2022); DOI: 10.2232/1.398.0092.

IceCube: Neutrinos from Active Galaxies (IceCube Collaboration, Halzen), Proc. of the 57th Rencontres de Moriond, (2023); astro-ph.HE/2305.07086.

Energy and X_max Reconstruction for Cosmic-Ray Events Recorded by a Prototype Station of the IceCube Surface Enhancement (IceCube Collaboration, Roxanne Turcotte-Tardif et al), PoS ARENA2022 (2023), 048, DOI: 10.22323/1.424.0048.

Public Kaggle Competition "IceCube -- Neutrinos in Deep Ice" (IceCube Collaboration, Philipp Eller for the collaboration), arxiv: 2307.15289 [astro-ph.HE].

Search for neutrino sources from the direction of IceCube alert events (IceCube Collaboration, Martina Karl for the collaboration), arxiv: 2307.15387 [astro-ph.HE].

Estimation of X_max for air showers measured at IceCube with elevated radio antennas of a prototype surface station (IceCube Collaboration, Roxanne Turcotte et al), arxiv: 2307.15394 [astro-ph.HE].

Recent neutrino oscillation result with the IceCube experiment (IceCube Collaboration, Shiqi Yu et al), arxiv: 2307.15855 [hep-ex].

Direction reconstruction for the in-ice radio array of IceCube-Gen2 IceCube-Gen2 Collaboration, Sjoerd Bouma et al), arxiv: 2307.13971 [astro-ph.HE].

Deep Learning for the classification and recovery of Cosmic-Ray signals against background measured at South Pole (IceCube Collaboration, Abdul Rehman et al), PoS ARENA2022 (2023), 012, DOI: 10.22323/1.424.0012.

New Measurement of Muon Neutrino Disappearance from the IceCube Experiment (IceCube Collaboration, Shiqi Yu for the collaboration), arxiv: 2305.16514 [astro-ph.HE].

Design and Expected Performance of the IceCube-Gen2 Surface Array and its Radio Component IceCube-Gen2 Collaboration, Frank G. Schröder for the collaboration), PoS ARENA2022 (2023), 058, arxiv: 2306.05900 [astro-ph.HE], DOI: 10.22323/1.424.0058.

Towards IceCube-Gen2: Plans for the in-ice radio array IceCube-Gen2 Collaboration, Anna Nelles for the collaboration), PoS ARENA2022 (2023), 057, DOI: 10.22323/1.424.0057.

R&D and production of the scintillation detectors for the IceCube Surface Array Enhancement (IceCube Collaboration, Shefali Shefali for the collaboration), PoS ECRS (2023), 141, DOI: 10.22323/1.423.0141.

Forecasted Sensitivity of IceCube-Gen2 to the Astrophysical Diffuse Spectrum IceCube-Gen2 Collaboration, Alina Kochocki for the collaboration), PoS ECRS (2023), 100, DOI: 10.22323/1.423.0100.

Atmospheric neutrino oscillations in IceCube-DeepCore (IceCube Collaboration, James Vincent Mead for the collaboration), PoS NOW2022 (2023), 007, DOI: 10.22323/1.421.0007.

Cosmic-Ray Composition analysis at IceCube using Graph Neural Networks (IceCube Collaboration, Paras Koundal et al), PoS ECRS (2023), 085, arxiv: 2211.17198 [astro-ph.HE], DOI: 10.22323/1.423.0085.

Multiplicity of TeV muons in air showers measured with IceTop and IceCube (IceCube Collaboration, Stef Verpoest for the collaboration), PoS ECRS (2023), 074, arxiv: 2211.16970 [astro-ph.HE], DOI: 10.22323/1.423.0074.

Cosmic ray measurements with IceCube and IceTop (IceCube Collaboration, Dennis Soldin for the collaboration), SciPost Phys.Proc. 13 (2023), 002, arxiv: 2208.01911 [astro-ph.HE], DOI: 10.21468/SciPostPhysProc.13.002.

Recent results of cosmic-ray studies with IceTop at the IceCube Neutrino Observatory (IceCube Collaboration, Donghwa Kang for the collaboration), Adv. Space Res. 72 (2023), 4613-4624, arxiv: 2310.05614 [astro-ph.HE], DOI: 10.1016/j.asr.2023.09.027 (publication).

Enhanced Starting Track Real-time Stream for IceCube (IceCube Collaboration, Jesse Osborn et al), arxiv: 2308.03856 [astro-ph.IM].

Search for dark matter annihilations in the center of the Earth with IceCube (IceCube Collaboration, Giovanni Renzi et al), arxiv: 2308.02920 [astro-ph.HE].

Galactic Core-Collapse Supernovae at IceCube: "Fire Drill" Data Challenges and follow-up (IceCube Collaboration, Spencer Griswold et al), arxiv: 2308.01843 [astro-ph.HE].

Measurement of the astrophysical diffuse neutrino flux in a combined fit of IceCube's high energy neutrino data (IceCube Collaboration, Richard Naab et al), arxiv: 2308.00191 [astro-ph.HE].

New IceTop trigger in the context of the planned IceCube surface detector enhancement at the South Pole (IceCube Collaboration, Ek Narayan Paudel for the collaboration), JINST 19 (2024) 01, C01031, arxiv: 2401.12026 [astro-ph.HE], DOI: 10.1088/1748-0221/19/01/C01031.

Towards the Composition of sub-PeV Cosmic Rays at IceCube (IceCube Collaboration, Abbasi et al), PoS TAUP2023 (2024), 137, DOI: 10.22323/1.441.0137.

Prospects for the Detection of the Standing Accretion Shock Instability in IceCube-Gen2 (IceCube-Gen2 Collaboration, Jakob Beise for the collaboration), PoS TAUP2023 (2024), 159; DOI: 10.22323/1.441.0159; arxiv: 2311.08898 [astro-ph.HE].

Cosmic ray detection with the IceTop Enhancement (IceCube Collaboration, Rasha Abbasi et al), PoS EPS-HEP2023 (2024), 081, DOI: 10.22323/1.449.0081.

Realtime Follow-up of External Alerts with the IceCube Supernova Data Acquisition System (IceCube Collaboration, Nora Valtonen-Mattila for the collaboration), PoS TAUP2023 (2024), 236, arxiv: 2311.10398 [astro-ph.HE], DOI: 10.22323/1.441.0236.

Sensitivity Study of IceCube-Gen2 Surface Array for Cosmic-Ray Anisotropy, (IceCube-Gen2 Collaboration, Wenjie Hou for the collaboration), DOI: 10.22323/1.441.0146, PoS TAUP2023 (2024), 146

Exploring the high-energy Universe with IceCube (IceCube Collaboration, Jim Madsen for the collaboration), DOI: 10.22323/1.459.0005, PoS HEASA2023 (2024), 005

Probing neutrino interactions and properties with IceCube (IceCube Collaboration, Mohamed Rameez for the collaboration), DOI: 10.22323/1.462.0028, PoS HQL2023 (2024), 028

Recent IceCube Results: Diffuse Flux, Point Sources and Dark Matter (IceCube Collaboration, Minjin Jeong for the collaboration), arxiv: 2407.16371 [astro-ph.HE]

Searches for Galactic Neutrinos with the IceCube Neutrino observatory (IceCube Collaboration, A. Sandrock for the collaboration), arxiv: 2405.09267 [astro-ph.HE]

Observation of air showers with an IceCube-Gen2 prototype station at the Pierre Auger Observatory (IceCube-Gen2 Collaboration, for the Pierre Auger Collaboration, Stef Verpoest for the collaboration), arxiv: 2409.00713 [astro-ph.HE]

Recent cosmogenic neutrino search results with IceCube and prospects with IceCube-Gen2 (IceCube Collaboration, Maximilian Meier for the collaboration), arxiv: 2409.01740 [astro-ph.HE]

The Faint Particle Trigger for the IceCube Neutrino Observatory (IceCube Collaboration, Timo Stuerwald for the collaboration), arxiv: 2411.00484 [astro-ph.IM], DOI: 10.22323/1.476.0856, PoS ICHEP2024 (2025), 856

Searching for sub-TeV IceCube neutrinos correlated to sub-threshold GW events, (IceCube Collaboration, Tista Mukherjee (KIT, Karlsruhe, IAP) for the collaboration), arxiv: 2506.09694 [astro-ph.HE]

Muons in air showers with IceCube: muon density at ground and high-energy muon multiplicity (IceCube Collaboration, Stef Verpoest (Delaware U.) for the collaboration), PoS UHECR2024 (2025), 035

Recent High Energy Neutrino Results from the IceCube Collaboration (IceCube Collaboration, Colton Hill (Chiba U.) for the collaboration), DOI: 10.22323/1.473.0068, PoS NOW2024 (2025), 068

Estimating the Sensitivity of IceCube-Gen2 to Cosmic Ray Mass Separation (IceCube-Gen2 Collaboration, Manisha Lohan (TIFR, Mumbai, DHEP) for the collaboration), DOI: 10.1007/978-981-95-1513-4_29, Springer Proc. Phys. 432 (2026), 138-141

Towards the Composition of sub-PeV Cosmic Rays at IceCube (IceCube Collaboration, Rasha Abbasi et al.), DOI: 10.22323/1.441.0137, PoS TAUP2023 (2024), 137

Science Potential and Technical Design of the IceCube-Gen2 Surface Array (IceCube-Gen2 Collaboration, Frank G. Schroeder (Delaware U. and Delaware U., Bartol Inst. and KIT, Karlsruhe) for the collaboration), DOI: 10.22323/1.484.0055, PoS UHECR2024 (2025), 055, PoS UHECR2024 (2024), 055

Application of Machine Learning to Identify Radio Pulses of Air Showers at the South Pole (ARENA 2024) (IceCube Collaboration, Frank G. Schroeder et al.), DOI: 10.22323/1.470.0034 (publication), PoS ARENA2024 (2024), 034

Cosmic ray detection with the IceTop Enhancement (IceCube Collaboration, Rasha Abbasi et al.), DOI: 10.22323/1.449.0081, PoS EPS-HEP2023 (2024), 081

Establishing Earth’s Matter Effect in Atmospheric Neutrino Oscillations at IceCube DeepCore (IceCube Collaboration, Anuj Kumar Upadhyay (Wisconsin U., Madison and Bhubaneswar, Inst. Phys. and Aligarh Muslim U.) for the collaboration), DOI: 10.1007/978-981-96-4986-0_76, Springer Proc. Phys. 322 (2026), 463-466

IceCube DeepCore's sensitivity to Non-Standard neutrino Interactions in the Earth (IceCube Collaboration, Samyak Jain (Wisconsin U., Madison) et al.), arxiv: 2601.22374 [hep-ph]

Students

Graduates

M. Chaves, Calculation of Multiple Bremsstrahlung in Gauge Theories (1982).

Jean-René Cudell, Experimental Challenges to the Standard Model: A Reevaluation (1987).

Choong Sun Kim, The Standard Model with Three Generations (1988).

Robert S. Fletcher, Effects of Soft Gluons at High Energy Colliders (1990).

Stéphane Keller, Hadronic Structure of the Photon (1991).

Kavoos Deilamian, Spectroscopic Test of the Symmetrization Postulate and Pauli Exclusion Principle (1991).

Mary Louise Stong, Two-Loop Corrections and Top Threshold Effects in Calculation of Observables at *Z* Peak (1993).

Timothy Stelzer, Radiation Patterns in Diffractive and Electroweak Events (1993).

Ricardo Vázquez, Física de Partículas a Altas Energias y Astrofísca (Santiago de Compostella, Spain); On the Precision of Tests of the Quantum Structure of the Standard Model (Madison) (both 1994).

Vijaya Kandahadai, Transparency Measurements of the South Pole Ice: Implications for AMANDA (1995).

Lori Gray, On the Architecture of High Energy Neutrino Telescopes (1996).

John Jacobsen, Simulating the Detection of Muons and Neutrinos in Deep Antarctic Ice (1996).

Igor Liubarski, Corporeal Manifestations in the Antarctic Muon and Neutrino Detector Array (1997).

Kevin Stenson, A Study of D^0 Production from 500 GeV π^-–Nucleon Interactions (1998).

Scott Radeztsky, A Dalitz Analysis of the Decay $D_\varsigma^+ \rightarrow \pi^+\pi^-\pi^+$ (1999).

Tyce de Young, Observation of Atmospheric Neutrinos with the Antarctic Muon and Neutrino Detector Array (2001).

Rellen Hardtke, Search for Gamma Ray Bursts with the AMANDA Detector (2002).

Dan Hooper, Astroparticle Physics beyond the Standard Model (2003).

David Steele, Search for Extraterrestrial Point Sources with the AMANDA-II Detector (2003).

Magdalena Gonzalez, Gamma Ray Bursts: Their High Energy Emission as Observed by EGRET (2005).

Students

Melanie Clarke, Search for Gamma Ray Bursts with the AMANDA Detector (2005).

Michael Stamatikos, Probing for Correlated Neutrino Emission from Gamma-Ray Bursts with Antarctic Cherenkov Telescopes: A Theoretical Modeling and Analytical Search Paradigm in the Context of the Fireball Phenomenology (2005).

Aongus Ó Murchadha, The Search for Galactic Cosmic-Ray Sources with IceCube (2011).

Nathan Whitehorn, A Search for High-Energy Neutrino Emission from Gamma-Ray Bursts (2012).

Benedikt Riedel, Modeling and Understanding Supernova Signals in the IceCube Neutrino Observatory (2014).

Carlos Alberto Argüelles Delgado, New Physics with Atmospheric Neutrinos (2015).

Ali Kheirandish, Particle Astrophysics with Cosmic Neutrinos (2016).

Kevin Ghorbani, The Search for Sterile Neutrinos with IceCube (2018).

Logan Wille, Search for Tau Neutrinos Using IceCube (2019).

Vanessa López Barquero, The Role of Chaos and Magnetic Fields in the Cosmic Ray Anisotropy (2021)

Qinrui Liu, High-Energy Cosmic Neutrinos as a Window to the Universe (2021)

Kayla Leonard DeHolton, Measuring the Atmospheric Neutrino Oscillation Parameters with IceCube DeepCore (2022)

Ibrahim Safa, New Physics with PeV Astrophysical Neutrino Beams (2022)

Jeffrey Lazar, Tools and Techniques for a New Generation of Neutrino Telescopes (2023)

Maria Prado Rodriquez, Measurement of the Neutrino Mass Ordering with 9.28 years of IceCube DeepCore Data (2024)

Joshua Henry Peterson, Improved Techniques for the Determination of the Neutrino Mass Ordering with IceCube DeepCore and the IceCube Upgrade (2026)

Invited Talks

Vosbergen Conference, Vlieland, Netherlands (1967 and 1968).

International Conference on High Energy Physics, Lund, Sweden (mini-rapporteur, 1969).

Symposium on $\pi\pi$ Scattering, Niels Bohr Institute, Copenhagen, Denmark (1969).

Rencontres de Moriond, Meribel, France (1971).

International Conference on High Energy Physics, Chicago, Illinois (mini-rapporteur, 1973.

Rencontres de Moriond, Meribel, France (1973).

Nimrod Lecture at Rutherford Laboratory, Oxford, England (1973).

International Summer Institute on Particle Interactions at Very High Energies, Louvain, Belgium (1973).

Total Cross Sections and High-p_T Phenomena above ISR Energies, at the 1974 June Meeting of the American Physical Society, Salt Lake City, Utah. Bull. Am Phys. Soc. II **15** 648 (1974).

ANL Summer Study on Polarized Proton Experiments and Beams (1974).

Canadian Physical Society, Montreal, Quebec (1975).

Probing the New Particles with Hadron Beams, International Conf. on Production of Particles with New Quantum Numbers, University of Wisconsin, Madison (1976).

Conference on Charm, University of Leuven, Belgium (1977).

Cosener's House Meeting on New Accelerators, Abingdon, Oxford, England (1978).

Sixth International Workshop on Weak Interactions, Ames, Iowa (1978).

Meeting of the American Physical Society, Blacksburg, Virginia (1979).

US – Japan Seminar on Cosmic Ray Physics, University of Delaware (1979).

Workshop on a Central Detector Facility for the Fermilab $\bar{p}p$ Collider, Fermilab (1981).

XXIst Cracow School of Theoretical Physics (1981).

Second Topical Workshop on Forward Collider Physics, Madison, Wisconsin (1982).

Workshop on Very High Energy Interactions in Cosmic Rays, University of Pennsylvania (1982).

British Forum on High Energy Physics (1982).

Workshop on ISABELLE Experiments, Brookhaven (1982).

Invited Talks

Annual Symposium on Theoretical Physics, Rutherford Appleton Laboratory, Oxford, England (1982).

Japanese Physical Society Meeting (1982).

Tsukuba Workshop on $\bar{p}p$ Colliders, Tsukuba University, Japan (1983).

Meeting of the Physical Society of Finland (1983).

CDF Forward Components Workshop, University of Wisconsin, Madison (1984).

Oregon Workshop on Super High Energy Physics, Eugene, Oregon (1984).

Wisconsin Association of Physics and Science Teachers, Madison, Wisconsin (1985).

8th International Conf. on Ultra-Relativistic Nucleus-Nucleus Collisions, Lawrence Berkeley Laboratory (1986).

VIth Astrophysics Meeting on Accretion Processes in Astrophysics, Les Arcs, France (1986).

Lewis Center for Physics: Workshop on Binary X-ray Sources, Princeton, New Jersey (1986).

Neutrino Masses and Neutrino Astrophysics, Ashland, Wisconsin (1987).

From Colliders to Supercolliders, Madison, Wisconsin (1987).

Landelijk Seminarie, NIKHEF, Amsterdam, Netherlands (1987).

INFN-Eloisatron Project International Workshop on Very High Energy Proton-Proton Physics, Erice, Italy (1987).

Aspen Winter Physics Conference on Elementary Particle Physics (1988).

QCD in Astrophysics, Fermilab (1988).

TeV Physics, Johns Hopkins Workshops on Current Problems in Particle Physics (1988).

Snowmass 88, Aspen, Colorado (1988).

APS Meeting of the Division of Particles and Fields, Storrs, Connecticut (1988).

Fifth International Symposium on Very High Energy Cosmic Ray Interactions, Lodz, Poland (1988).

Beyond the Standard Model, Iowa State University, Ames (1989).

Symposium on Collider Phenomenology, Argonne National Laboratory, Illinois (1989).

Astrophysics and Particle Physics, San Miniato, Italy (1989).

Invited Talks

21st International Cosmic Ray Conference, Adelaide, Australia (1989).

Z Phenomenology Symposium, Madison, Wisconsin (1990).

Polarized Collider Workshop, Penn State University (1990).

International Conference on High Energy Gamma-Ray Astronomy, University of Michigan, Ann Arbor (1990).

Astrophysical Aspects of the Most Energetic Cosmic Rays, Kofu, Yamanashi, Japan (1990).

Symposium for the 60th Birthday of R.J.N. Phillips, Rutherford Appleton Laboratory, Oxford, England (1990).

SSC Physics Symposium, University of Wisconsin, Madison (1990).

APS Division of Particles and Fields, Vancouver, Canada (1991).

22nd International Cosmic Ray Conference, Dublin (1991).

The Many Aspects of Neutrino Physics, Fermilab (1991).

SSC Full Acceptance Detector Organizational Meeting, Stanford (1992).

Second Gleb Wataghin Summer School on High Energy Phenomenology, State University of Campinas, Brazil (1992).

International Symposium on Neutrino Telescopes for the 400th Anniversary of Galileo, appointed by the Serenissima Republic of Venice, Italy (1992).

Gordon Research Conference, Proctor Academy, Andover, New Hampshire (1992).

SSC Physics Symposium, University of Wisconsin, Madison (1992).

CDF Workshop on Forward Physics, Fermilab (1992).

Workshop on Small-*x* and Diffractive Physics at the Tevatron, Fermilab (1992).

DAPHNE and Other Topics in Particle Physics, Frascati, Italy (1992).

Dertig Jaar Instituut Theoretische Fysica te Leuven, Belgium (1992).

American Physical Society Meeting, Astrophysics Division, Washington, DC (1992).

SSC Physics Symposium, University of Wisconsin, Madison (1993).

Workshop on Physics at Current Accelerators and the Supercollider, Argonne National Laboratory (1993).

Escuela Latino Americana de Fisica, Mar del Plata, Argentina (1993).

Invited Talks

Summer Symposium on Physics at the CERN Large Hadron Collider and Astroparticle Physics, Uto, Sweden (1993).

TAUP 93: Theory and Phenomenology in Astroparticle and Underground Physics, Gran Sasso, Italy (1993).

XXIII International Symposium on Multiparticle Dynamics, Aspen, Colorado (1993).

New Physics at New Facilities, Case Western Reserve University, Cleveland (1993).

Aspen Winter Conference, “Particle Physics before the Year 2000,” Aspen, Colorado (1994).

JPL/Caltech Neutrino Astrophysics Technology Workshop, Pasadena, California (1994).

Workshop on Gamma-Gamma Colliders, Lawrence Berkeley Laboratory, Berkeley, California (1994).

International Symposium on Very High Energy Cosmic Ray Interactions, Waseda University, Tokyo, Japan (1994).

APS Division of Particles and Fields Meeting, Albuquerque, New Mexico (1994).

Cosmic Rays: Physics and Astrophysics (with T. Gaisser et *al*.), National Academy of Sciences, research briefings, NAS/NRC, Washington, DC (1994).

CAM 94 Physics Meeting, Cancun, Mexico (1994).

LBL Meeting on Physics and Simulation Issues for km^3 Neutrino Astronomy, Berkeley, California (1995).

Arkansas Space Grant Consortium (1995).

Antarctic Experimenters Meeting, NSF, Washington, DC (1995).

TAUP 95: IV^{th} International Workshop on Theoretical and Phenomenological Aspects of Underground Physics, Toledo, Spain (1995).

WIN 95: XV^{th} Workshop on Weak Interactions and Neutrinos, Talloires, France (1995).

Topics in the Weak Interaction, Vanderbilt University, Nashville, Tennessee (1996).

US Meeting on Future Prospects for Kilometer-Scale Neutrino Detectors, Jet Propulsion National Laboratory, Pasadena, California (1996).

International Symposium on the Occasion of the Retirement of Martin Block from Northwestern University, Evanston, Illinois (1996).

Nordita/Uppsala Astroparticle Workshop on High Energy Neutrino Astronomy, Uppsala, Sweden (1996).

Invited Talks

Workshop on High Energy Neutrino Astronomy, Aspen Center for Physics Summer Program, Aspen, Colorado (1996).

IV Gleb Wataghin School on High Energy Phenomenology, Campinas, Brazil (1996).

International Workshop, “New Worlds in Astroparticle Physics,” Algarve, Portugal (1996).

XXI School on Theoretical Physics, Silesia, Poland (1996).

Third Workshop on Small-x and Diffractive Physics, Argonne National Laboratory (1996).

HEPAP Subpanel on Planning for the Future of US High Energy Physics, Stanford Linear Accelerator Center (1997).

Symposio en Honor de José Adem, Cinvestav, Mexico (1997).

ADM60-FEST: Topical Issues in Deep Inelastic Scattering, Durham, England (1997).

Vietnam School on Cosmic Ray Physics, Hanoi, Vietnam (1997).

Aspen Winter Conference on Particle Physics, Aspen, Colorado (1998).

Aspen Rotary Club, Aspen, Colorado (1998).

IceCube Neutrino Detector Workshop, University of California, Irvine (1998).

Workshop on Perspectives of High-Energy Particle Astrophysics: Physics at Cosmic Accelerators, Burg Liebenzell, Germany (1998).

TASI-98, Boulder, Colorado (1998).

South African Institute of Physics Conference (SAIP98), Cape Town, South Africa (1998).

Erice Summer School, Palermo, Italy (1998).

Aspen Winter Conference on Particle Physics, “Advances in Particle Physics: Recent Results and Open Questions,” Aspen, Colorado (1999).

Fred Reines Memorial Symposium, University of California, Irvine (1999).

Gamma Ray Burst Workshop, Institute for Theoretical Physics, University of California, Santa Barbara (1999).

Workshop on Particle Astrophysics with High Energy Neutrinos, Arlington, Virginia (1999).

National Academy Decadal Review, Atlanta, Georgia (1999).

Inner-Outer Space, Fermilab (1999).

Neutrino Summer, CERN, Switzerland (1999).

Invited Talks

Low Energy Neutrino Workshop, INP, University of Washington, Seattle (1999).

New Perspectives, Fermilab (1999).

QCD (Multiparticle Production), Brown University, Providence, Rhode Island (1999).

OWL/Airwatch Workshop, University of California, Los Angeles (1999).

7th Course: Current Topics in Astrofundamental Physics, International School of Astrophysics "D. Chalonge," Erice, Italy (1999).

American Astronomical Society, Atlanta, Georgia (2000).

Aspen Summer Workshop: Neutrinos with Mass (2000).

Scandinavian Summer School, Niels Bohr Institute, Copenhagen, Denmark (2000).

Nederlandse Natuurkundige Vereniging, Amsterdam, Netherlands (2000).

Snowmass 2001: The Future of Particle Physics.

Green Bay Retired Men's Club (2001).

18th International Workshop on Weak Interactions and Neutrinos, Christchurch, New Zealand (2002).

Aspen Winter Conference on Ultra–High-Energy Particles from Space, Aspen, Colorado (2002).

Aspen Winter Conference on High-Energy Particle Physics, Aspen, Colorado (2002).

Michaelfest, Liverpool, England (2002).

Symposium on Neutrinos and Particle Astrophysics, Beijing, China (2002).

School on Neutrino Physics and Astrophysics (NEUPAST), Trieste, Italy (2002).

Lion's Club, Madison, Wisconsin (2002).

Symposium on Neutrino Astronomy for High School Teachers, Antwerp, Belgium (2002).

10th International Workshop on Neutrino Telescopes, Venice, Italy (2003).

VERITAS collaboration Meeting, Adler Planetarium, Chicago, Illinois (2003).

Int'l Workshop on UHE Neutrino Telescopes, Chiba University, Chiba, Japan (2003).

127th Natl. Mtg. on the American Association of Physics Teachers, Madison, Wisconsin (2003).

Nijmegen 03: International Summer School on Particle and Nuclear Astrophysics, Nijmegen, Netherlands (2003).

COSMO 03: Intl. Workshop on Particle Physics and the Universe, Ambleside, England (2003).

NSF Symposium, “The Universe from the Ground Up,” Ground-Based Astronomy in the 21st Century, Washington, DC (2003).

Kavli-CERCA Conference on the Future of Cosmology, Case Western Reserve University, Cleveland, Ohio (2003).

Teachers Experiencing Antarctica and the Arctic (TEA), Polar Science Seminar, Crystal Lake, Illinois (2003).

219th Reunion, Nederlandse Astronomen Club, University of Nijmegen, Netherlands (2003).

6th RESCUE International Symposium, Frontier in Astroparticle Physics and Cosmology, University of Tokyo, Tokyo, Japan (2003).

42nd Junior Science, Engineering and Humanities Symposium, Madison, Wisconsin (2004).

3rd International Workshop on Ultra High Energy Cosmic Rays, Leeds, England (2004).

International WE-Heraeus Summer School, “Physics with Cosmic Accelerators,” Bad Honnef, Germany (2004).

Intl. Saltdome Shower Array Workshop (SalSA 2005), SLAC, Stanford, California (2005).

Annual Meeting of the German Physical Society, “Einstein and the Year of Physics,” Berlin, Germany (2005).

Midwest Regional Polar Science Workshop, St. Benedictine University, Lisle, Illinois (2005).

XXII Intl. Symposium on Lepton-Proton Interactions at High Energy, Uppsala, Sweden (2005).

TeV Particle Astrophysics Workshop, Fermilab, Batavia, Illinois (2005).

LHC Summer School, Maria Laach, Germany (2005).

Madrid Neutrino Mini-Workshop, “What is the Neutrino,” U. Autonoma, Madrid, Spain (2005).

Joint Annual Conf. of the National Society of Black Physicists and the National Society of Hispanic Physicists, San Jose, California (2006).

Be-Poles, Brussels, Belgium (2006).

Science@Poles, joint meeting of Italian, French and US polar programs. Embassy of Italy, Washington, DC (2006).

The Multi-Messenger Approach to High-Energy Gamma-Ray Sources, Barcelona, Spain (2006).

Eleventh Marcel Grossman Meeting on General Relativity, Berlin, Germany (2006).

Invited Talks

PASCOS 2006, Ohio State University (2006).

German School of Particle Astrophysics, Erlangen, Germany (lecturer – 2006).

CHIPP Workshop on Neutrino Physics, Bern, Switzerland (2006).

XXIII Texas Symposium on Relativistic Astrophysics – Texas in Melbourne, Australia (2006).

Colliders to Cosmic Rays 2007, Granlibakken, Tahoe City, California (intro. lecture – 2007).

XII International Workshop on Neutrino Telescopes, Venice, Italy (2007).

The Violent Universe Winter School, Les Houches, France (lecturer – 2007).

Ultra-High–Energy Cosmic Rays, Neutrinos and Photons, Penn State University (2007).

Dark Side of the Universe 2007 Workshop (DSU07), University of Minnesota (2007).

30th International Cosmic Ray Conference, Merida, Mexico (highlight talk - 2007).

10th Intl. Conf. on Topics in Astroparticle and Underground Physics, Sendai, Japan (2007).

Abelson Advancing Science Seminar, AAAS, Washington DC (2007).

The Centenary of the Birth of Professor Marian Miesowicz, University of Krakow, Poland (2007).

PASC Winter School, Sesimbra, Portugal (2007).

Neutrino Oscillations in Venice, Venice, Italy (2008).

Huberfest, University of Wisconsin, Madison (2008).

Carolina International Symposium on Neutrino Physics, South Carolina (2008).

Neutrino 2008, Organizer with J. Adams and S. Parke, Christchurch, New Zealand (2008).

AAS Meeting, St. Louis (2008).

50 years of MPI for Physics in Munich, Munich, Germany (2008).

Neutrino Frontiers, University of Minneapolis, Minneapolis (2008).

PANIC 08, Student Day Lecturer on Particle Astrophysics, Eilat, Israel (2008)

Discrete 08, Valencia University, Valencia, Spain (2008).

XIII International Workshop on Neutrino Telescopes, Venice, Italy (2009).

National Science Teacher Association, New Orleans, Louisiana (2009).

Invited Talks

American Association of Physics Teachers, Harrisburg, Pennsylvania (2009).

American Association for Physics Teachers, Boston University (2009).

Multi-Messenger Relativistic Astrophysics, Georgia Tech (2009).

Nuclear Physics talk, APS Meeting, San Diego, California (2009).

Antarctic Deepfreeze Association Reunion, Middleton, Wisconsin (2009).

XXIèmes Rencontres de Blois, Windows on the Universe, Blois, France (2009).

Summer School on Nuclear and Particle Astrophysics, University of Washington, Seattle (2009).

Intl. Summer School on Particle and Nuclear Astrophysics, Nijmegen, Netherlands (2009).

COSMO 09: Intl. Workshop on Particle Physics and the Universe, Geneva, Switzerland (2009).

Meeting Honoring the 100th Anniversary of the Birthday of Gunnar Kallen, Lund, Sweden (2010).

Karpathian Summer School, Bucharest, Romania (2010).

Erice Summer School, Italy (2010).

Tokyo Summer School, Japan (2010).

Space Place, UW-Madison (2010).

Christmas Meeting, Barcelona, Spain (2010).

EPS Meeting on Nuclear Physics in Astrophysics, Eilat, Israel (2011).

Multi-Messenger Astronomy of Cosmic Rays, Kavli Workshop, Beijing, China (2011).

Experiments on the Cosmic Frontier, Fermilab (2011).

Swieca Summer School on Particles and Fields, Campos de Jordao, Sao Paulo, Brazil (2011).

2nd Intl. Conference on Advancements in Nuclear Instrumentation, Measurement Methods and their Applications (ANIMMA), Ghent, Belgium (2011).

51st Cracow School of Theoretical Physics: Soft Side of the LHC, Zakopane, Poland (2011).

Intl. Workshop on Cosmic Rays and Cosmic Neutrinos: Looking at the Neutrino Sky (NUSKY), Trieste, Italy (2011).

European Physical Society Intl. Europhysics Conference on High Energy Physics, Grenoble, France (2011).

XIIIth Intl. Workshop on Neutrino Factories, Super Beams and Beta Beams (NuFact 11), CERN.

Invited Talks

Dark Matter Underground and in the Heavens, CERN, Geneva, Switzerland (2011).

ECFA Meeting, CERN, Geneva, Switzerland (2011).

Radiography of the Earth, University of Tokyo, Japan (2011).

Quantum Universe 2, Groningen, Netherlands (2012).

Public Lecture, Edgewood College, Madison, Wisconsin (2012).

100 Years of Cosmic Particles, Victor Hess Symposium, Vienna, Austria (2012).

University of Geneva, Switzerland (2012).

World Science Festival, New York, New York (2012).

University of Wisconsin Alumni, Pittsburgh, Pennsylvania (2012).

11th Intl. Conference on Nucleus-Nucleus Collisions, San Antonio, Texas (2012) – public lecture.

Technical University of Munich Affiliated Professor Lecture, Munich, Germany (2012).

Erice Summer School, Italy (2012).

Dark Attack, Ascona, Switzerland (2012).

100 Years of Cosmic Rays, Bad Saarow, Germany (2012).

International Astronomical Union, Beijing, China (2012).

Neutrino Oscillation Workshop, Conca Specchiulla, Italy (2012).

Cycle of Cosmology and Astrophysics, Madrid, Spain (2012).

Texas Symposium on Relativist Astrophysics, São Paulo, Brazil (2012).

9th Intl. Symposium on Cosmology and Particle Astrophysics, Taipei, Taiwan (2012).

NASA / Goddard Space Flight Center, Greenbelt, Maryland (2013).

American Physical Society, Denver, Colorado (2013).

Cosmic Frontier Workshop, Stanford, Menlo Park, California (3 talks, 2013).

Jefferson Laboratory, Newport News, Virginia (2013).

Institute for Advanced Study, Princeton, New Jersey (2013).

International Cosmic Ray Conference, Rio de Janeiro, Brazil (highlight talk, 2013).

Pontecorvo 100, Pisa, Italy (2013).

Invited Talks

150th Anniversary of the German Astronomical Society, Tübingen, Germany (2013).

Trevorfest, Tucson, Arizona (2013).

CosPA, Honolulu, Hawaii (2013).

MERCUR Winter School, Bad Honnef, Germany (2014).

Erlangen School for Astroparticle Physics, Bärnfels, Germany (2014).

Masterclass for Ph.D. Students, Veldhoven, Netherlands (2014).

IDPASC School, Braga, Portugal (2014).

Neutrinos Beyond IceCube, Arlington, Virginia (2014).

Art of Experiment, Honoring David Nygren, Berkeley, California (2014).

ARENA 2014, Annapolis, Maryland

Royal Swedish Academy of Sciences (public lecture – 2014).

CosmoParticle Physics in Belgium, Gent University (2014).

SWAPS, Geneva, Switzerland (2014).

International Meeting for Large Neutrino Infrastructures, Paris, France (2014).

MIAPP Workshop, Garching, Germany (2014).

Frontiers of Fundamental Physics, Marseille, France (2014).

High Energy Astrophysics Division, American Astronomical Society, Chicago, Illinois (2014).

Multiple Messengers and Challenges in Astroparticle Physics, Gran Sasso (2014).

Ultra High Energy Cosmic Rays, Springdale, Utah (2014).

International Committee for Future Accelerators, Beijing, China (2014).

Neutrinos: Recent Developments and Future Challenges, Santa Barbara, California (2014).

Multimessenger Astronomy in the Era of PeV Neutrinos, Annapolis, MD (2014).

The Physics of Neutrinos, Brussels, Belgium (2015).

The Successful Story of Neutrino Telescopes, Venice, Italy (2015).

American Physical Society, Baltimore, MD; also at CalTech, Pasadena, CA (2015).

Invited Talks

Rencontres de Blois, Particle Physics and Cosmology, France (2015).

Solvay-Francqui Workshop, *Neutrinos: From Reactors to the Cosmos*, Brussels (2015).

Workshop on Weak Interactions and Neutrinos (WIN2015), Heidelberg, Germany (2015).

European Physical Society Conference on High Energy Physics, Vienna, Austria (2015).

Canadian Association of Physics, Edmonton, Alberta (2015).

Invisibles 15 Workshop, Madrid, Spain (2015).

Marcel Grossman Meeting, Rome, Italy (2015).

Summer Program for Physics, Aspen, Colorado (2015).

Opening lecture, SLAC Summer Institute, Menlo Park, California (2015).

NuAtmospheres, Royal Society of London, UK (2015).

TEXAS Symposium, Geneva, Switzerland (2015).

Very High Energy Particle Astrophysics, Honolulu, Hawaii (2016).

UCLA Dark Matter Symposium, Los Angeles, California (2016).

David Cline Memorial, Los Angeles, California (2016).

Intl. Conf. on Computational Photography (ICCP 2016), Northwestern, Evanston, Illinois (2016).

Pheno 2016, Pittsburgh, Pennsylvania (2016).

QCD-21, Paris, France (2016).

53rd Course of the International School of Subnuclear Physics, Erice, Italy (2016).

20th Course of the International School of Cosmic Ray Astrophysics, Erice, Italy (2016).

Aspen Summer Physics Program (2016).

14th Workshop on Non-Perturbative Quantum Chromodynamics, Paris (2016).

54th Course New Physics Frontiers in the LHC-2, Erice, Italy (2016).

School for Cosmic Ray Physics, Erice (2016).

RAPP Center Inauguration, Bochum, Germany (2016).

KVAB Forward Look, Palace of the Academies, Brussels, Belgium (2016).

Universidad Autónoma de Madrid, Spain (2016).

Invited Talks

École Polytechnique Fédérale de Lausanne, Switzerland (2016).

International Symposium on Parity Violation and Neutrino Physics, Shanghai, China (2016).

Sources of Galactic Cosmic Rays, Paris, France (2016).

High Energy Neutrino and Cosmic-Ray Astrophysics, Weizmann Institute, Rehevot, Israel (2016).

XLV Intl. Meeting for Fundamental Physics, Granada, Spain (2017).

Nederlandse Astronomenconferentie, Nijmegen, Netherlands (2017).

Veritas 10-Year Celebration, Tucson, Arizona (2017).

Tri-Institute Summer School on Elementary Particle Physics, Sudbury, Ontario (2017).

Physics Summer School, Aspen, Colorado (2017).

Dark Matter, Neutrinos and Their Connections, Odense, Denmark (2017).

Cosmo 2017, Paris, France (2017).

RAPP Center Inauguration, Bochum, Germany (2017).

Erice Summer School, Neutrinos in Cosmology, in Astro, in Particle and in Nuclear Physics, Erice, Italy (2017).

Perspectives in Astroparticle physics from High Energy Neutrinos (PAHEN), Naples, Italy (2017).

Supernova Neutrino OBServations (SNOBS), Mainz, Germany (2017).

10th Anniversary of Gravitation Astroparticle Physics Amsterdam (GRAPPA), Amsterdam, Netherlands (2017).

The Transient Universe, Singapore (2018)

American Astronomical Society, Ft. Washington, Maryland (2018).

High Energy Universe: Gamma Ray, Neutrino and Cosmic Ray Astronomy Workshop, Munich, Germany (2018).

Pierre Binétruy: From Theory to Strategy of Discovery, Paris, France (2018).

Phenomenology 2018, Pittsburgh, Pennsylvania (2018).

Conference on the Intersections of Particle and Nuclear Physics (CIPANP), Palm Springs, California (2018).

Invited Talks

Particles. Strings & COSmology (PASCOS), Cleveland, Ohio (2018).

Astrophysics – MAGIC, La Palma, Canary Islands (2018).

Erice International School of Subnuclear Physics 54th Course Particle Physics: Yesterday, Today and Tomorrow, Erice, Italy (2018).

15th Marcel Grossman Meeting, Rome, Italy (2018).

Tri-Institute Summer School in Elementary Particles, Waterloo, Ontario, Canada (2018).

Intl. School of Cosmic Ray Astrophysics 21st Course, Italy (2018).

Particle Flavour Fever Summer School, Paul Scherrer Institute, Zuoz, Switzerland (2018).

Julius Wess Lectures at Karlsruhe Institute of Technology, Germany (2018).

$\int d\,k\,\Pi$ Doktoratskolleg Particles and Interactions Summer School, Hirschwang, Austria (2018).

Searching for the Sources of Galactic Cosmic Rays, Paris, France (2018).

Annual Theory Meeting, Durham, UK (2018).

Kaczmarczik Lecture, Philadelphia, Pennsylvania (2018).

57th Intl. Winter Meeting on Nuclear Physics, Bormio, Italy (2019).

Ewan Lecture, Queens University, Kingston, Ontario, Canada (2019).

XVII Intl. Workshop on Neutrino Telescopes, Venice, Italy (2019).

Cluster of Excellence Inauguration, Mainz, Germany (2019).

1st CTA Science Symposium, Bologna, Italy (2019).

CERN Council Open Symposium on the Update of European Strategy for Particle Physics, Granada, Spain (2019).

HTCondor Meeting, Madison, Wisconsin (2019).

DC Meets Madison, Washington, DC (2019).

Invisibles19 Workshop, Valencia, Spain (2019).

59th Cracow School of Theoretical Physics, Zakopane, Poland (2019).

New Windows to the Universe Summer School, Santander, Spain (2019).

Great Lakes Cosmology Workshop, Rochester, New York (2019).

Invited Talks

INSS International Neutrino Summer School, Fermilab, Chicago, Illinois (2019).

SLAC Summer Institute, Menlo Park, CA (2019).

36th International Cosmic Ray Conference, Madison, WI (2019).

Brookhaven Forum 2019 (BF2019): Particle Physics and Cosmology in the 2020s, Brookhaven, New York (2019).

Multi-Messenger Astrophysics in the Gravitational Wave Era, Yukawa Institute, Kyoto, Japan (2019).

Gunnar Källén Symposium “The Elusive Neutrino,” Lund University, Lund, Sweden (2019).

Particle Physics Christmas Lecture, Oxford, UK (2019).

AMEGO Splinter Meeting, AAS Meeting, Honolulu, Hawaii (2020).

Padova Excellence School of Physics of the Universe, Asiago, Italy (2020).

Neutrino 2020, Headline Talk, Fermilab, Chicago (2020).

Cosmic Rays and Neutrinos in the Multi-Messenger Era, APC Paris, France (2020).

XIX International Workshop on Neutrino Telescopes, Venice, Italy (2021).

La Thuile 2021 – Les Rencontres de Physique de la Vallée d'Aosta, Italy (2021).

Forward Physics Facility – Kickoff Meeting, University of California, Irvine (2021).

16th Marcel Grossmann Meeting, Rome, Italy (2021).

38th Epiphany Conference on Recent Advances in Astroparticle Physics, Krakow, Poland (2022).

XV Scientific Meeting of the Spanish Astronomical Society, Tenerife, Spain (2022).

X- and Gamma-ray Counterparts of New Transients in the Multimessenger Era, COSPAR 22, Athens, Greece (2022).

Lectures at IDPASC school for doctoral students, Olomouc, Czech Republic (2022).

Plenary Lecture at Astronomical Physical Society Meeting, Pasadena, California (2022).

NASA Physics of Cosmos Analysis Group (PhysPAG) at the American Physical Society Meeting, New York, New York (2022).

ISCRA Erice Summer School on Cosmic Ray Physics, Erice, Italy (2022).

Multi-messenger Tomography of Earth (MMTE 2022) Workshop, Snowbird, Utah (2022).

Invited Talks

NCRAL VISION 2022, Port Washington, Wisconsin (2022).

Kickoff Meeting of the RAPP Center, Ruhr-Universität Bochum, Germany (2022).

Snowmass Cosmic Frontier Colloquium, virtual (2022).

58th International School of Subnuclear Physics, Erice, Italy (2022).

Cosmic Rays and Neutrinos in the Multi-Messenger Era, Louvain-La-Neuve, Belgium (2022).

Colloquium on 50 years of particle physics research, National Academy of Sciences, Brussels, Belgium (2022).

Cosmic Rays in the Multi-Messenger Era, APC, Paris, France (2022).

NCfA Symposium 2023: The Path Forward in Multimessenger Astrophysics, Las Vegas (2023).

A Decade of Discoveries in High Energy Physics, Brussels Town Hall, Belgium (2023).

57th Rencontres de Moriond, La Thuile, Italy (2023).

UCLA Dark Matter 2023, Los Angeles (2023).

Gaisser Memorial Meeting, University of Delaware, Newark (2023).

Cosmic Ray Anisotropy Workshop, Loyola University, Chicago (2023).

From Hadrons to Stars and the Cosmos: a tribute to Prof. Ricardo Vázquez López, Santiago de Compostela, Spain (2023).

IceCube summer school, Madison (2023).

MAGIC 20, La Palma, Spain (2023).

ANTARES Celebration, Paris, France (remote 2023).

XX International Workshop on Neutrino Telescopes, Venice, Italy (2023).

GRAMS collaboration meeting, Columbia University, New York City, (2023).

International Symposium on Neutrino Physics and Beyond, HKUST Jockey Club Institute for Advanced Study, Hong Kong (2023).

NCfA Multimessenger Symposium 2024, Las Vegas (2023).

MPIK-CDY School on the future of gamma ray astronomy, Heidelberg, Germany (2024).

A perfect place for physics, MPI for Physics, Garching, Germany (2024).

International School of Cosmic Ray Physics, Erice, Italy (2024).

Invited Talks

International School on Nonequilibrium Phenomena, Erice, Italy (2024).

8th Heidelberg International Symposium, on High-Energy Gamma Ray Astronomy, Milan, Italy (2024).

Conference in memory of Veniamin Sergeyevich Berezinsky, L'Aquila, Italy (2024).

Cosmic Rays and Neutrinos in the Multimessenger Era, APC, Paris, France (2024).

Laudatio of Glennys Farrar for the Wess Prize, KIT, Karlsruhe, Germany (2024).

Neutrinos in Physics and Astrophysics Workshop: Celebrating the contributions of Baha Balantekin and George Fuller, University of California, Berkeley (2025).

Lake Louise Summer Institute, University of Alberta, Canada (2025).

APS Global Physics Summit, Physical Review Symposium on Quantum Mechanics, Anaheim (2025).

2nd LHAASO Symposium, Chinese University of Hong Kong, China (2025).

Neutrino Physics and its Applications to World Peace, University of Hawaii (2025).

The 2025 Phenomenology Symposium, University of Pittsburgh (2025).

Phenomenology Before and After the Standard Model: a symposium in honor of Vernon Barger, Madison (2025).

12th International Workshop on Ring Imaging Cherenkov Detectors (RICH 2025), Mainz, Germany (2025).

II EU Workshop on Water Cherenkov Experiments for Precision Physics, Cracow, Poland (2025).

XXI International Workshop on Neutrino Telescopes, Padua, Italy (2025).

III Workshop Riograndense de Física de Altas Energias, Porto Alegre, Brazil (2025).

APS Global Physics Summit, APS Medal Lecture, Denver (2026).

Colloquium and Seminar Talks

1966 – 1967
University of Leiden

1969 – 1970
CERN
E.T.H., Zurich
University of Liège, Belgium

1970 – 1971
Duality for Pedestrians, lectures delivered at the Belgian-Dutch Summer School and the CERN Academic Program
E.T.H., Zurich
Rutherford Laboratory
University of Durham
University of Birmingham
Westfield College, London
University of Nice

1971 – 1972
University of Wisconsin (colloquium)
Northwestern University
Michigan State University
Arizona State University (colloquium)
CERN
Rutherford Laboratory
Case Western Reserve University
Fermilab
University of Minnesota.

1972 – 1973
University of Illinois
Fermi Institute, University of Chicago
Argonne National Laboratory (2 separate visits)
Rutherford Laboratory
Model Independent Features of Diffraction, lectures delivered at the Summer Institute on Particle Interactions, Louvain, Belgium

1974 – 1975
Louisiana State University (colloquium)
McGill University
University of Wisconsin (colloquium)
University of Indiana

1976 – 1977
Rutherford Laboratory (Nimrod Lecture)
University of Liverpool (colloquium)
Imperial College
University of Oxford
University of Durham
University of Birmingham
University of Southampton

University of Cambridge, D.A.T.M.P.
Cavendish Laboratory, Cambridge
University College, London
Westfield College, London
University of Leuven
University of Mons
University of Antwerp
University of Wuppertal
University of Bielefeld
University of Liverpool (high-energy physics seminar)

1977 – 1978
Iowa State University
University of Toronto
Fermilab
University of Chicago
Ohio State University
McGill University

1978 – 1979
University of Delaware (colloquium)
University of Louvain-la-Neuve
University of Paris-Sud
Rutherford Laboratory
University of Hawaii
Mathematics Department, University of Wisconsin

1979 – 1980
Duke University (seminar and colloquium)
Fermilab
DESY
University of Zaragoza
University of Madrid
University of Barcelona
University of Hawaii
University of Oregon
University of California – Berkeley
University of Washington – Seattle

1980 – 1981
Fermilab
Johns Hopkins University (colloquium)
Argonne National Laboratory (colloquium)
University of Louvain
University of Liège
Rice University (colloquium)
Texas A & M (colloquium)
University of Wisconsin – Madison (colloquium)
University of Wisconsin – Parkside (colloquium)
University of Wisconsin – Madison (lecture for HS students visiting campus)
Rutherford Laboratory

University of Durham
University of Liverpool

1981 – 1982
University of Michigan
University of Guelph (colloquium)
Purdue University (nuclear physics and theory seminars)
University of California
University of Hawaii (colloquium)
University of Arizona
Argonne National Laboratory

1982 – 1983
Rutherford Laboratory
University of Cambridge
University of Durham
University of Leuven
University of Brussels
University of Arizona (colloquium)
University of Liverpool
University of Leeds (colloquium)
University College, London
University of Tokyo
Waseda University, Tokyo
University of Tokyo, Institute for Nuclear Study
University of Tokyo (nuclear physics seminar)
Hiroshima University
University of Bristol (colloquium)
Imperial College
University of Southampton
KEK – Tsukuba
Tokyo Metropolitan University
Tokyo Metropolitan University (experimental seminar)
University of Tokyo, Komaba
Kyoto University
Kyoto University, Research Institute for Fundamental Research
Kobe University
Osaka City University
University of Helsinki
Yuvaskula University, Finland
Nordita, Copenhagen

1983 – 1984
Duke University (colloquium)
Carnegie-Mellon University
University of Durham

1984 – 1985
Interagency Colloquium, Washington, DC
Northwestern University (colloquium)
University of Wisconsin – Madison (mathematics department)

University of Oregon
Fermilab
University of Durham
University of Manchester
Westfield College, London
Cavendish Laboratory, Cambridge

1985 – 1986
McGill University (seminar and colloquium)
Duke University (colloquium)
University of Tokyo, Institute for Nuclear Study
Tokyo Metropolitan University

1987 – 1988
University of British Columbia (colloquium)
Rice University (colloquium)
Argonne National Laboratory (colloquium)
University of Kansas
Johns Hopkins University
McGill University
Rutgers University
Harvard University
University of Wisconsin – Platteville (public lecture)
University of Durham

1988 – 1989
Penn State University (colloquium)
Northwestern University (colloquium)
Louisiana State University (colloquium)
University of Michigan
Los Alamos National Laboratory (colloquium)
Fermilab
McGill University

1989 – 1990
University of California, Riverside (colloquium)

1990 – 1991
Fermilab
University of Guelph (colloquium)
KEK – Tsukuba
University of Iowa (colloquium)
Purdue University
University of Hawaii

1991 – 1992
The New Astronomy, lectures at the IInd Gleb Wataghin Summer School, São Paolo, Brazil
Northwestern University (colloquium)
Rice University (colloquium)
Florida State University (colloquium)

University of Utah (colloquium)
Fermilab (colloquium)
Indiana University (colloquium)
Ohio University (colloquium)
University of Chicago
University of Hawaii

1992 – 1993
University of Leuven (colloquium)
University of Liège (colloquium)
Nagoya University (colloquium)
University of New Mexico (colloquium)
University of Louvain-la-Neuve
Brookhaven National Laboratory
University of Hawaii

1993 – 1994
University of Cincinnati (colloquium)
University of Michigan
California Institute of Technology
University of Santiago de Compostella
Stanford Linear Accelerator Center (SLAC) (colloquium)
University of Wisconsin – River Falls (∑⌈⌉∑ colloquium)
National Science Foundation (colloquium)

1994 – 1995
University of Pittsburgh (colloquium)
Lawrence Radiation Laboratory, Berkeley (colloquium)
University of California, Berkeley
Ecole Polytechnique, Paris
Argonne National Laboratory (colloquium)
Fermilab
Carleton University, Ottawa
McGill University
Iowa State University (colloquium)
University of Arkansas, Little Rock
University of Arkansas, Pine Bluff (public lecture)
California Institute of Technology
University of Hawaii (colloquium)
University of Florida (colloquium)
Los Alamos National Laboratory (colloquium)
Los Alamos National Laboratory (astrophysics seminar)

1995 – 1996
DESY-Zeuthen (colloquium)
DESY-Hamburg (colloquium)
State University of New York, Buffalo (colloquium)
Johns Hopkins University (particle physics seminar and colloquium)
Rice University (colloquium)
New Mexico State University (astronomy seminar and colloquium)
Fermilab (colloquium)

Northwestern University (colloquium)
Columbia University
University of Stockholm (colloquium)
University of Guelph (colloquium)
Argonne National Laboratory
University of North Carolina
Duke U
Electroweak Interactions: Loop for Cyclists, lectures presented at the IVth Gleb Wataghin School on HE Phenomenology, UNICAMP, Campinas, Brazil

1997

Case Western Reserve University (colloquium)
Penn State University
University of California, San Diego (colloquium)
CINVESTAV, Mexico City
UNAM, Mexico City (colloquium)
University of Illinois, Urbana-Champaign
University of Indiana (colloquium)
Wayne State University (colloquium)

1998

Ohio State University (colloquium)
Michigan State University (colloquium)
Space Place, UW–Madison
Uppsala University
Jefferson National Laboratory, Newport News, VA
Seoul National University
Korean Institute for Advanced Studies
Yonsei University, Seoul
NASA Goddard Space Flight Center (colloquium)
McGill University (colloquium)
Columbia University (colloquium)

1999

SLAC (experimental physics seminar)
California Institute of Technology (experimental physics seminar)
University of California, Berkeley (LBNL research progress meeting)
CERN (laboratory colloquium)
Argonne National Laboratory (theory seminar)
Clark Atlanta University (seminar)
Stanford University (colloquium)
Uppsala University (public lecture)
CERN (theory seminar)
University of Washington, Institute for Nuclear Physics (seminar)
University of Chicago, Enrico Fermi Institute for Nuclear Physics (seminar)
University of California. Los Angeles (experimental physics seminar)
Iowa State University (colloquium)
University of Utrecht (experimental physics seminar)
26th Intl. Cosmic Ray Conference: Symposium on the Observation of EHE Particles & Neutrinos, & Symposium for Gaurang Yodh, Salt Lake City, UT

Colloquium and Seminar Talks

2000

University of Illinois, Chicago (colloquium)
University of Kentucky (colloquium)
University of Vienna (colloquium)
University of Brussels (public lecture)
Aspen Center for Physics
Stanford University (colloquium)
Argonne National Laboratory (Dept. of Physics colloquium)
University of Illinois (high-energy physics seminar)

2001

Naval Research Laboratory, Washington, DC (colloquium)
University of Alabama (colloquium)
Fermilab (colloquium)
Massachusetts Institute of Technology (colloquium)
University of Wuppertal (public lecture)

2002

National Taiwan University (colloquium)
Michigan State University (colloquium)
Princeton University (colloquium)
Oklahoma State University (colloquium)
Durham University, England (colloquium)
Imperial College, London
National Research Council
University of Wisconsin roundtable talk

2003

Carnegie Mellon University (colloquium)
University of California, Los Angeles (colloquium)
Max Planck Institute, Munich (colloquium)
University of Rome (colloquium)
Katholieke Universiteit, Leuven (colloquium)
WARF Trustees, Madison (after dinner talk)
Science Visitors Board, Madison (after-dinner talk)
Melbourne University (colloquium)
University of Chicago (colloquium)
Atmospheric and Oceanographic Sciences, Madison (colloquium)
Toronto University (colloquium)
Perimeter Institute, Waterloo, Ontario (colloquium)

2004

University of Dortmund (colloquium)
DESY – Zeuthen (colloquium)
University of Minnesota (colloquium)
University of Florida (colloquium)
Rutgers University (colloquium)
Fermilab (wine and cheese colloquium)
SLAC (high-energy experimental physics seminar)

Colloquium and Seminar Talks

2005

Kavli Institute, Santa Barbara
Rotary Club, Madison
Oxford University (public lecture)
Argonne National Laboratory (colloquium)
University of Connecticut (colloquium)
University of Groningen (colloquium)
University of Amsterdam (colloquium)
University of Utrecht (colloquium)
Illinois Institute of Technology, Chicago (colloquium)
University of Illinois (colloquium)
Vanderbilt University (colloquium)

2006

Perimeter Institute (colloquium)
University of Guelph (colloquium)
University of Waterloo (colloquium)
Syracuse University (colloquium)
Southern University, Baton Rouge (public lecture)
DESY – Hamburg (Jentschke lecture)
Princeton University (Spitzer lectures)
Annual Meeting of Wisconsin Orthopedic Surgeons
Princeton University (colloquium)
CERN (colloquium)
Pisa University (colloquium)

2007

Brookhaven National Laboratory (colloquium)
EPFL Lausanne (colloquium)
University of Wisconsin, Milwaukee (colloquium)

2008

Harvard University (colloquium)
Brown University (colloquium)
Wichita State University (Watkins lecture)
University of California, Davis (colloquium)
Rice University (colloquium)
Bonn University (colloquium)
Aachen University (colloquium)
Humboldt University (colloquium)
Carnegie Mellon University (colloquium)
University of Wisconsin (Fourth Tuesday Science Lecture)
Goddard Space Flight Center, Washington, DC (colloquium)
Penn State University (colloquium and astrophysics seminar)
Barcelona, Spain (colloquium)

2009

Pennsylvania State University (public lecture)
Virginia Tech, Blacksburg, Virginia (colloquium)
Pennsylvania State University, Mont Alto (public lecture)
MIT, Boston (colloquium)

University of Leuven, Belgium (colloquium)
Gotheborg University, Sweden (colloquium)
University of Wuppertal, Germany (colloquium)
Center for Cosmology and AstroParticle Physics, Ohio State (public lecture)

2010

University of Utah (colloquium)
University of New Mexico (colloquium)

2011

University of Illinois at Chicago (colloquium)
Washington University at Saint Louis (colloquium)
Bochum University, Germany (colloquium)
Laboratório de Instrumentação e Física Experimental de Partículas, Lisbon, Portugal (public lecture)
Cline Observatory at Guilford College, Greensboro, North Carolina (colloquium and public lecture)
Duke University, North Carolina (colloquium)

2012

West High School Madison (class lecture)
Edgewood College, Madison (colloquium)
Wisconsin Institute of Discovery (public lecture)
University of Geneva (colloquium)
Pittsburgh Badgers (public lecture)
New York Science Festival (panel and salon on neutrinos)
Technical University Munich (colloquium)
University of Wisconsin-Milwaukee (colloquium)
Taiwan National University (colloquium)
Fundacion BBVA, Madrid (public lecture)
Space Place Madison (public lecture)

2013

Goddard Space Flight Center, Maryland (colloquium)
SLAC, Stanford University (colloquium)
State University of New York at Stony Brook (colloquium)
Frontiers of Science, Salt Lake City, Utah (public lecture)
University of Toronto (colloquium)
High Energy Seminar, Enrico Fermi Institute, University of Chicago
Radboud University, Nijmegen (colloquium)
Valencia University (colloquium)

2014

University of Massachusetts, Amherst (colloquium)
University of Washington (colloquium)
Technische Universität Dresden, Germany (colloquium)
Institut Astrophysique de Paris, France
Università di Roma Sapienza, Italy
Universität Heidelberg, Germany
Aspen Center for Physics High Energy Neutrino Workshop
University of Notre Dame (colloquium)

University of Florida (colloquium)
Swedish Physics Society (colloquium)
Brussels IceCube Software Bootcamp
Ohio State University (colloquium)
Purdue University (colloquium)
Indiana University (colloquium)
Korean Physical Society (colloquium)
Florida State University (colloquium)

2015

University of Valencia (colloquium)
Caltech (colloquium)
Universiteit Antwerpen (colloquium)
University of Texas-Arlington (colloquium)
Virtual Institute of Astroparticle Physics (VIA) lecture
Fermilab (public lecture)
Aspen Institute for Physics (public lecture and colloquium)
Marquette University (public lecture)
University of Houston (colloquium)
Rutgers University (colloquium)
UW Alumni Association, New York (public lecture)
University of Michigan (colloquium)
Walker Lecture, University of Michigan (public lecture)
Belgian Society for Cosmology and Particle Physics (colloquium)
University of Houston (colloquium)
University of Texas, Austin (colloquium)
Columbia University (colloquium)
University of New York at Buffalo (colloquium)
University of California at Davis (colloquium)

2016

Humboldt Kolleg on Particle Physics, Kitzbuhel, Austria
Georgia Institute of Technology (public lecture)
University of Münster, Germany
University of California, Davis
Université de Géneve, Switzerland

2017

Kiel University, Germany (colloquium)
Kiwanis, Madison
Fermilab, Chicago (colloquium)
University of Minnesota, Minneapolis (colloquium)
University of Virginia, Charlottesville (public lecture)
Madison West Businessmen Association, Madison
Madison Science Museum, Madison
Southern Methodist University (public lecture), University Park, Texas
50th Anniversary Physical Sciences Laboratory, Stoughton
German Physical Society, Berlin (public lecture)
JGU University, Mainz, Germany (colloquium)
Accademia dei Lincei, Rome (public lecture)
All-Amsterdam Physics Colloquium, Amsterdam

National Science Teachers Association, Milwaukee

2018

William & Mary University, Williamsburg, Virginia (colloquium)
Astronomy Day Keynote, University of South Dakota, Vermilion, SD
Roma Tre, INFN, Italy (colloquium)
Christian-Albrechts Universität, Kiel, Germany (colloquium)
Carnegie Mellon University and Pittsburgh University joined colloquium, Pennsylvania
KIT, Karlsruhe, Germany (colloquium)
Wisconsin Science Festival (public lecture)
WARF Lecture, Wisconsin Institutes for Discovery (public lecture)
Queens University, Kingston, Ontario (colloquium)
Wayne State University, Detroit, Michigan (colloquium)
Rome University, Italy (colloquium)

2019

Niels Bohr Institute, Copenhagen, Denmark (colloquium)
Tufts University, Boston, Massachusetts (colloquium)
University of Florida, Gainesville (colloquium and HEP seminar)
FAU Erlangen-Nurnberg, Germany (colloquium)
Erlangen, Germany (colloquium)
JINR, Dubna, Russia
The MIT Club at Washington DC, Washington (public lecture)

2020

University of Padua, Padua, Italy (colloquium)
University of California, Irvine (Gaurang Yodh Lecture and HEP seminar)
Notre Dame, South Bend, Indiana (colloquium)
University of Hawaii, Honolulu (colloquium)
University of Sao Paulo, San Carlos, Brazil (colloquium)
University of Sao Paulo, Sao Paulo, Brazil (colloquium)

2021

Gran Sasso Science Institute, L'Aquila, Italy (colloquium)
American Physical Society, Editors Colloquium series, Upton, NY (colloquium)
Institute for Nuclear Theory (INT), Seattle, USA
Arizona State University, Tempe, USA (colloquium)
Wednesday Night at the Lab, Madison, USA (special edition talk for IceCube 10th anniversary)
Munich Joint Astronomy Colloquium, Munich, Germany (colloquium)
American Physical Society (virtual talk as part of their Colloquium series)
Neutrino Social Global, Fermilab

2022

Warwick University (colloquium
Pennsylvania State University (colloquium)
Palacky University, Olomouc, Czech Republic (public lecture)
NASA Night Sky Network, webinar
STEAM Leon Lederman Seminar Series, webinar (two lectures)
Fermilab's Neutrino University, Fermilab
Extreme Non-Thermal Universe CDY Lecture, Columbia University

Cosmos Club, Washington, DC (public lecture)
INTO THE IMPOSSIBLE Podcast
Weekly Space Hangout, Planetary Science Institute, YouTube
NASA Night Sky Network webinar

2023

CfA Harvard High Energy seminar (remote)
Bhubaneswar University, India (colloquium) (remote)
Harvard-MIT Society of Physics Students Chilloquium (remote)
University of Minnesota (colloquium)
LIP, University of Lisbon, Lisbon, Portugal (colloquium)
TD Lee Institute, Shanghai, China (colloquium)
Shanghai Public Library, Shanghai, China (public lecture)
University of Wisconsin-Milwaukee, Milwaukee (colloquium)

2024

Michigan State University (colloquium)
McGill University, Montreal, Canada (colloquium)
University of Oregon, Eugene, Oregon (colloquium)

2025

Jefferson Laboratory (colloquium)
Stockholm University (colloquium)
Simon Fraser University (colloquium)
University of Victoria (colloquium)

2026

University of Tennessee, Oak Ridge (colloquium)

Service

Committees and Panels

2025 KIT Advisory Board Matter Meeting, Karlsruhe, Germany
Sudbury Neutrino Detector Scientific Advisory Committee, Toronto, Canada
GSSI Scientific Board, L'Aquila, Italy

2024 KIT Advisory Board Matter Meeting, Karlsruhe, Germany
IFIC Scientific Advisory Committee, Valencia, Spain (chair)
HEP@VUB advisory board, VUB, Brussels, Belgium
Science Advisory Committee, University of Santiago de Compostella, Spain
Sudbury Neutrino Detector Scientific Advisory Committee, Sudbury, Canada

2023 The Brinson Foundation and the Science Philanthropy Alliance Bunker Hill Farms Retreat, Bunker Hill, Illinois
KIT Advisory Board Matter Meeting, Karlsruhe, Germany
TDLI Advisory Committee, Shanghai, China
AugerPrime Advisory Committee, Malargüe, Argentina
Telescope Array Advisory Board, Salt Lake City, Utah (remote 2023)

2022 HEP@VUB advisory board, VUB, Brussels, Belgium
International Advisory Committee of the Chinese Academy of Sciences for future large science facilities for particle physics
IFIC Scientific Advisory Committee, Valencia, Spain (chair)
KIT Advisory Board Matter Meeting, Karlsruhe, Germany

2021 Science Advisory Committee, University of Santiago de Compostella, Spain
Karlsruhe Institute of Technology Advisory Board, Karlsruhe, Germany
Panel of the Canada First Research Excellence Fund
Program Advisory Committee, Fermilab, Chicago, IL
CCAPP Review Committee, The Ohio State University, Columbus, OH

2020 DOE CAREER Awards Selection Panel
Science Advisory Committee, University of Santiago de Compostella, Spain
Program Advisory Committee, Fermilab
CCAPP Review Committee, The Ohio State University, Columbus, OH
High Level Strategy Group for the Latin American Strategy Forum for Research Infrastructure

2019 DOE CAREER Awards Selection Panel
Science Advisory Committee, University of Santiago de Compostella, Spain (chair)
Program Advisory Committee, Fermilab
Karlsruhe Institute of Technology Advisory Board, Karlsruhe, Germany

2018 Instituto de Fisica Corpuscular Advisory Committee, Valencia, Spain
IIHE Advisory Committee, Vrije University, Brussels, Belgium (chair)
Program Advisory Committee, Fermilab

2017 Program and Science Advisory Committees, Fermilab
HEPAP Operations Review, Washington
Instituto de Fisica Corpuscular Advisory Committee, Valencia, Spain
Theoretical Nuclear Physics Review Panel, NSF, Washington

Service

2016 Spinoza Prize Committee, Utrecht, Netherlands
Max Planck Institute - Munich Advisory Committee
Advisory Committee for the Utah Telescope Array, Chair
Alpha Magnetic Spectrometer (AMS) Review

2015 Vrije Universiteit Brussel Advisory Committee
Astroparticle Physics European Consortium (ApPEC) Advisory Committee
Spinoza Prize Committee, Utrecht, Netherlands
Auger Upgrade Advisory Committee
Max Planck Institute - Munich Advisory Committee
Advisory Committee for the Utah Telescope Array, Chair

2014 HEP Review of Cosmic Frontier Program Experimental Operations
Spinoza Prize Committee, Utrecht, Netherlands
P5 (Particle Physics Project Prioritization Panel), US Department of Energy Selection Committee
Astroparticle Physics European Consortium

2013 Review Committee of the Institute for Cosmic Ray Research, University of Tokyo, Japan
Max Planck Institute - Munich Advisory Committee
Auger Upgrade Advisory Committee
Auger Finance Board
Vrije University Brussels High Energy Physics Advisory Committee
Astroparticle Physics European Consortium (APPEC)
P5 (Particle Physics Project Prioritization Panel), US Department of Energy Selection Committee

2012 Review of Operations of Particle Astrophysics Experiments for Department of Energy, Washington DC
Advisory Committee for the Utah Telescope Array, Chair
KIT-Karlsruhe Review of Selected Physics Programs
Munich Institute for Astro- and Particle Physics (MIAPP) Advisory Committee
Member of the International Neutrino Commission, Kyoto, Japan

2011 Director's Review of Pierre Auger Observatory, Fermilab, Illinois
Karlsruhe KCETA Advisory Committee, Germany
ASPERA Evaluation Committee, Paris, France
ECFA Committee for Future Large Infrastructures for Neutrino Oscillation Experiments, Daresbury, UK
Director's Review of Pierre Auger Observatory, Fermilab, Illinois
Committee on Space Research, Associate

2010 KCETA Advisory Committee, Karlsruhe, Germany
Committee of Visitors of the Department of Energy, Division of High-Energy Physics: Chair for Particle Astrophysics
Advisory Committee for the Utah Telescope Array, Chair

2009 Advisory Committee of the Max Planck Institute for Nuclear Physics, Heidelberg, Germany

Service

CCAPP Advisory Board, The Ohio State University

2008 KIT Advisory Committee, Karlsruhe, Germany
Comité d'Evaluation du APC, Paris, France

2007 Sudbury Neutrino Detector Advisory Committee
Comité d'Evaluation du CPPM à Marseille, France (chair)
Canada Foundation for Innovation (CFI) review of Cryopit at SNOLab, Ottawa (chair)
KVI Groningen Advisory Committee
Max Planck Institute Scientific Council (Munich).

2005 NSF Review of proposals submitted for NUSEL (National Underground Science and Engineering Laboratory)
Sudbury Neutrino Detector Advisory Committee

2004 Ad Hoc Advisory Committee, Cosmic Ray Group, U of Utah (chair)

2003 Sudbury Neutrino Detector Advisory Committee

2001 Member of SAGENAP, Washington, DC
Keck Advisory Committee, University of California – Berkeley
NASA Review of Astrophysics Proposals, Washington, DC
NSF Review Panel of the NUSEL Underground Laboratory
Ad Hoc Advisory Committee, Cosmic Ray Group, U of Utah (chair)
Sudbury Neutrino Detector Advisory Committee
Keck Advisory Committee, University of California - Riverside

2000 Ad Hoc Advisory Committee, Cosmic Ray Group, University of Utah (chair)
Sudbury Neutrino Detector Advisory Committee
Keck Advisory Committee, University of California - Riverside

1999 Sudbury Neutrino Detector Advisory Committee
Keck Advisory Committee, University of California - Riverside

1998 Ad Hoc Advisory Committee, Cosmic Ray Group, University of Utah (chair)
Keck Advisory Committee, University of California - Riverside

1995 Ad Hoc Advisory Committee, Cosmic Ray Group, University of Utah
Review of the Auger Project, Fermilab (chair)

1995 Visiting Committee, Bartol Research Institute

1994 California Institute of Technology (Jet Propulsion Laboratory)
Neutrino Astronomical Observatory (member of Local Working Group)
DOE Committee Review of Lawrence Radiation Laboratory, Berkeley
Blue Ribbon Panel on South Pole Station Redevelopment
National Research Council, Committee on Cosmic Rays
Visiting Committee, Bartol Research Institute

1993 Ad Hoc Advisory Committee, Cosmic Ray Group, University of Utah

Service

DOE Committee Review of Lawrence Radiation Laboratory, Berkeley
Visiting Committee, Bartol Research Institute

1992 Visiting Committee, Bartol Research Institute

1991 Visiting Committee, University of Utah, Department of Physics

1989 Space Station Attached Payloads Review Panel

1988 NSF Review of Science and Technology Centers:
Review of University of Utah's Fly's Eye Facility

1987 DOE Committee Review of Argonne National Laboratory
NSF Committee Review of University of Chicago

1986 Panel Review of the Research and Technology Grants of the NASA Astrophysics Program

1984 DOE Committee Review of Brookhaven National Laboratory

University Committees

2015 Search Committee for Vice Chancellor of Research

2005 – 2008 Committee on Honorary Degrees

2003 Campus Research Computing Committee

1999 – 2003 Council of the Space Science and Engineering Center

1995 Committee on Vilas, Hilldale and Bascom Selections

1992 – 1993 Computer Sciences L & S Review Committee (chair)
Committee on Vilas, Hilldale and Bascom Selections

Courses Taught

Courses Taught by Year

Academic Year	Course # (Fall)	Course # (Spring)
1972 – 73	--	731
1973 – 74	732	107
1974 – 75	107	103
1975 – 76	104	103
1976 – 77	104	--
1977 – 78	107	202
1978 – 79	208	--
1979 – 80	202	170 (U of Hawaii)
1980 – 81	801	--
1981 – 82	109	735
1983 – 84	109	735
1984 – 85	107	109
1985 – 86	109	103
1986 – 87	--	735
1987 – 88	109	505
1988 – 89	109	109
1989 – 90	109	801
1990 – 91	735	109
1991 – 92	--	735
1992 – 93	835	109
1993 – 94	835	109
1994 – 95	835	835
1995 – 96	801	109
1996 – 97	109	109
1997 – 98	109	109
1998 – 99	801	--
1999 – 2000	109	--
2003 – 04	--	107
2004 – 05	805	109
2006 – 07	109	--
2007 – 08	109	--
2008 – 09	805	--
2009 – 10	107	--
2010 – 11	107	--
2011 – 12	--	107
2014 – 15	--	535
2015 – 16	--	535
2016 – 17	--	107
2019 – 20	109	--