James M. Madsen
Department of Physics
UW-River Falls
PH: (715) 425-3235 James.Madsen@uwrf.edu

Education:

Ph.D.	1987	Colorado School of Mines, (Applied Physics, Minor: Metallurgy)
B.S.	1982	University of Wisconsin, Madison
		(Double major: Applied Math, Engineering & Physics; Philosophy)

Experience:

2012-present	*Associate Director, Education and Outreach*	IceCube Collaboration
2009-present	*Chair, Professor of Physics*	University of Wisconsin-River Falls
2007-2008	*Visiting Professor*	University of Wisconsin-Madison
2001-2007	*Chair, Professor of Physics*	University of Wisconsin-River Falls
1999 - 2000	*Visiting Professor*	University of Wisconsin-Madison
1996 - 2001	*Associate Professor of Physics,*	University of Wisconsin-River Falls
1993 - 1996	*Assistant Professor of Physics,*	University of Wisconsin-River Falls
1989 - 1993	*Senior Lecturer, Physics Department,*	University of Wisconsin-River Falls
1987 - 1989	*Postdoctoral Research Assistant- Physics and Polymer Science,*	University of Massachusetts-Amherst
1985 - 1986	*IBM Graduate Fellow*-Physics Department	Colorado School of Mines

Professional Memberships

Wisconsin Association of Physics Teachers
American Physical Society
National Science Teachers Association

Research Interests

Neutrino Astrophysics

Current: Cosmic-ray and solar physics with IceTop and IceCube, Education and Outreach
2007-2008: Sabbatical project investigated cosmic ray simulation software.
2000-2006: Designed and constructed frames, sunshades, crates, and muon tagger for IceTop.
1999-2000: Sabbatical project with the AMANDA/IceCube group at UW-Madison. Ran simulations on the IceCube detector, supported IceTop, and worked on education and outreach.

Awards

2008 Washington Park High School Hall of Fame
2008 UWRF College of Arts Science Outstanding Scholarly Activity
2008 Wisconsin Association of Physics Teachers Service to and excellence in the teaching of physics at the college or university level
2007 UWRF Distinguished Teacher Award

Leadership

Chair, UWRF Physics Department: Collaboratively rebuilt UWRF Physics program that lost five of seven faculty members to retirement. Successfully advocated for an eighth position in challenging budgetary times, significantly increased staff diversity, saw external grant success increase, and encouraged and supported adoption of innovative teaching practices including active learning studio format for introductory physics, direct measurement videos, and video reports.

Associate Director of IceCube responsible for E&O: Direct and continue to grow the IceCube E&O program, leveraging resources with external grants and synergistic partnerships. Work with the NSF PolarTREC program to send teachers to the South Pole (four to date), develop and staff 8-day summer enrichment science/math courses for the UWRF Upward Bound program (400 high school students over the last decade), and fund undergraduate astrophysics summer research experiences (nearly 100 students in 15 years).

Chair, IceCube Speakers Committee (2011-2015): Received and posted opportunities to present IceCube talks at international meetings (over 40 requests annually). Worked with three other committee members to deliver a transparent, equitable process for allocating invited talks.

Chair, UWRF Faculty Senate (2010-2011): Set agendas and chaired biweekly meetings for 23 member UWRF Faculty Senate, worked with executive committee to recruit faculty and staff for dozens of Faculty Senate committee positions, set charges for Faculty Senate committees, and represented UWRF Faculty at monthly UW System meetings during a trying, turbulent year.

Grants

PI	NSF ANT 09344762 Sub award from UW-Madison for E&O activities	$861,000	2011-current
Co-PI	NSF 1460752 *REU Site: Research in Neutrino Astrophysics at the University of Wisconsin-River Falls*	$232,000	2015-2017
PI	NSF 1356635 *IRES: U.S.-European International Research Experience-Particle Astrophysics for Undergraduates*	$250,000	2014-2016
Co-PI	NSF 1341312 *Collaborative Research: Elemental Composition of High Energy Solar Particles*	$340,000	2014-2019
PI	NSF 1245914 *Collaborative Research: Neutron Monitor Observations of Cosmic Rays from Jang Bogo and McMurdo*	$172,000	2013-2017
Co-PI	Ira and Ineva Reilly-Baldwin Wisconsin Idea Endowment *Bringing the Universe to Wisconsin*	$20,000	2012-2013
PI	NSF ANT-0838534 *Collaborative Research: Measurement of Cosmic Ray Response Functions for an Ice Cherenkov Detector*	$24,000	2009
PI	*Sub award from UW-Madison for E&O activities*	$173,000	2007-2010
PI	NSF OPP 0236449 *Sub award from UW-Madison for IceTop construction activities*	$460,000	2003-2007

Astrophysics Publications
Key:

#) Paper Title
arxiv preprint number
Link to journal
Journal Reference

1) Flavor Ratio of Astrophysical Neutrinos above 35 TeV in IceCube
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1502.03376 [astro-ph.HE].
10.1103/PhysRevLett.114.171102.
Phys.Rev.Lett. 114 (2015) 17, 171102.

2) Search for Prompt Neutrino Emission from Gamma-Ray Bursts with IceCube
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1412.6510 [astro-ph.HE].
10.1088/2041-8205/805/1/L5.
Astrophys.J. 805 (2015) 1, L5.

3) Determining neutrino oscillation parameters from atmospheric muon neutrino disappearance with three years of IceCube DeepCore data
By IceCube Collaboration (M. G. Aartsen et al.).
arXiv:1410.7227 [hep-ex].
10.1103/PhysRevD.91.072004.
Phys.Rev. D91 (2015) 7, 072004.

4) Atmospheric and astrophysical neutrinos above 1 TeV interacting in IceCube
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1410.1749 [astro-ph.HE].
10.1103/PhysRevD.91.022001.
Phys.Rev. D91 (2015) 2, 022001.

5) Development of a General Analysis and Unfolding Scheme and its Application to Measure the Energy Spectrum of Atmospheric Neutrinos with IceCube
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1409.4535 [astro-ph.HE].
10.1140/epjc/s10052-015-3330-z.
Eur.Phys.J. C75 (2015) 3, 116.

6) Searches for small-scale anisotropies from neutrino point sources with three years of IceCube data
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1408.0634 [astro-ph.HE].
10.1016/j.astropartphys.2015.01.001.
Astropart.Phys. 66 (2015) 39-52.

7) Multimessenger search for sources of gravitational waves and high-energy neutrinos: Initial results for LIGO-Virgo and IceCube
By IceCube and LIGO Scientific and VIRGO Collaborations (M.G. Aartsen et al.).
arXiv:1407.1042 [astro-ph.HE].
10.1103/PhysRevD.90.102002.
Phys.Rev. D90 (2014) 10, 102002.

8) Multipole analysis of IceCube data to search for dark matter accumulated in the Galactic halo
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1406.6868 [astro-ph.HE].
10.1140/epjc/s10052-014-3224-5.
Eur.Phys.J. C75 (2015) 1, 20.

9) Searches for Extended and Point-like Neutrino Sources with Four Years of IceCube Data
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1406.6757 [astro-ph.HE].
10.1088/0004-637X/796/2/109.

10) Observation of High-Energy Astrophysical Neutrinos in Three Years of IceCube Data
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1405.5303 [astro-ph.HE].
10.1103/PhysRevLett.113.101101.
Phys.Rev.Lett. 113 (2014) 101101.

11) Search for non-relativistic Magnetic Monopoles with IceCube
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1402.3460 [astro-ph.CO].
10.1140/epjc/s10052-014-2938-8.
Eur.Phys.J. C74 (2014) 7, 2938.

12) Search for neutrino-induced particle showers with IceCube-40
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1312.0104 [astro-ph.HE].
10.1103/PhysRevD.89.102001.
Phys.Rev. D89 (2014) 10, 102001.

13) Search for a diffuse flux of astrophysical muon neutrinos with the IceCube 59-string configuration
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1311.7048 [astro-ph.HE].
10.1103/PhysRevD.89.062007.
Phys.Rev. D89 (2014) 6, 062007.

14) Evidence for High-Energy Extraterrestrial Neutrinos at the IceCube Detector
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1311.5238 [astro-ph.HE].
10.1126/science.1242856.
Science 342 (2013) 1242856.

15) Energy Reconstruction Methods in the IceCube Neutrino Telescope
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1311.4767 [physics.ins-det].
10.1088/1748-0221/9/03/P03009.
JINST 9 (2014) P03009.

16) Probing the origin of cosmic rays with extremely high energy neutrinos using the IceCube Observatory
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1310.5477 [astro-ph.HE].
10.1103/PhysRevD.88.112008.
Phys.Rev. D88 (2013) 112008.

17) Improvement in Fast Particle Track Reconstruction with Robust Statistics
By M.G. Aartsen, R. Abbasi, Y. Abdou, M. Ackermann, J. Adams, J.A. Aguilar, M. Ahlers, D. Altmann et al..
arXiv:1308.5501 [astro-ph.IM].
10.1016/j.nima.2013.10.074.
Nucl.Instrum.Meth. A736 (2014) 143-149.

18) Search for Time-independent Neutrino Emission from Astrophysical Sources with 3 yr of IceCube Data
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1307.6669 [astro-ph.HE].
10.1088/0004-637X/779/2/132.
Astrophys.J. 779 (2013) 132.

19) Measurement of the cosmic ray energy spectrum with IceTop-73
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1307.3795 [astro-ph.HE].
10.1103/PhysRevD.88.042004.
Phys.Rev. D88 (2013) 4, 042004.

20) IceCube Search for Dark Matter Annihilation in nearby Galaxies and Galaxy Clusters
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1307.3473 [astro-ph.HE].
10.1103/PhysRevD.88.122001.
Phys.Rev. D88 (2013) 122001.

21) Observation of the cosmic-ray shadow of the Moon with IceCube
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1305.6811 [astro-ph.HE].
10.1103/PhysRevD.89.102004.
Phys.Rev. D89 (2014) 10, 102004.

22) Measurement of Atmospheric Neutrino Oscillations with IceCube
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1305.3909 [hep-ex].
10.1103/PhysRevLett.111.081801.
Phys.Rev.Lett. 111 (2013) 8, 081801.

23) First observation of PeV-energy neutrinos with IceCube
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1304.5356 [astro-ph.HE].
10.1103/PhysRevLett.111.021103.
Phys.Rev.Lett. 111 (2013) 021103.

24) Measurement of South Pole ice transparency with the IceCube LED calibration system
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1301.5361 [astro-ph.IM].
10.1016/j.nima.2013.01.054.
Nucl.Instrum.Meth. A711 (2013) 73-89.

25) Measurement of the Atmospheric ν_e flux in IceCube
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1212.4760 [hep-ex].
10.1103/PhysRevLett.110.151105.
Phys.Rev.Lett. 110 (2013) 15, 151105.

26) Search for dark matter annihilations in the Sun with the 79-string IceCube detector
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1212.4097 [astro-ph.HE].
10.1103/PhysRevLett.110.131302.
Phys.Rev.Lett. 110 (2013) 13, 131302.

27) Search for Galactic PeV Gamma Rays with the IceCube Neutrino Observatory
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1210.7992 [astro-ph.HE].
10.1103/PhysRevD.87.062002.
Phys.Rev. D87 (2013) 6, 062002.

28) Observation of Cosmic Ray Anisotropy with the IceTop Air Shower Array
By IceCube Collaboration (M.G. Aartsen et al.).
arXiv:1210.5278 [astro-ph.HE].
10.1088/0004-637X/765/1/55.
Astrophys.J. 765 (2013) 55.

29) Searches for high-energy neutrino emission in the Galaxy with the combined IceCube-AMANDA detector
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1210.3273 [astro-ph.HE].
10.1088/0004-637X/763/1/33.
Astrophys.J. 763 (2013) 33.

30) Search for Relativistic Magnetic Monopoles with IceCube
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1208.4861 [astro-ph.HE].
10.1103/PhysRevD.87.022001.
Phys.Rev. D87 (2013) 2, 022001.

31) An improved method for measuring muon energy using the truncated mean of dE/dx
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1208.3430 [physics.data-an].
10.1016/j.nima.2012.11.081.
Nucl.Instrum.Meth. A703 (2013) 190-198.

32) Lateral Distribution of Muons in IceCube Cosmic Ray Events
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1208.2979 [astro-ph.HE].
10.1103/PhysRevD.87.012005.
Phys.Rev. D87 (2013) 1, 012005.

33) IceTop: The surface component of IceCube
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1207.6326 [astro-ph.IM].
10.1016/j.nima.2012.10.067.
Nucl.Instrum.Meth. A700 (2013) 188-220.

34) Cosmic Ray Composition and Energy Spectrum from 1-30 PeV Using the 40-String Configuration of IceTop and IceCube
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1207.3455 [astro-ph.HE].
10.1016/j.astropartphys.2012.11.003.
Astropart.Phys. 42 (2013) 15-32.

35) Use of event-level neutrino telescope data in global fits for theories of new physics
By IceCube Collaboration (P. Scott et al.).
arXiv:1207.0810 [hep-ph].
10.1088/1475-7516/2012/11/057.
JCAP 1211 (2012) 057.

36) An absence of neutrinos associated with cosmic-ray acceleration in γ-ray bursts
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1204.4219 [astro-ph.HE].
10.1038/nature11068.
Nature 484 (2012) 351-353.

37) A Search for UHE Tau Neutrinos with IceCube
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1202.4564 [astro-ph.HE].
10.1103/PhysRevD.86.022005.
Phys.Rev. D86 (2012) 022005.

38) All-particle cosmic ray energy spectrum measured with 26 IceTop stations
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1202.3039 [astro-ph.HE].
10.1016/j.astropartphys.2013.01.016.
Astropart.Phys. 44 (2013) 40-58.

39) Multi-year search for dark matter annihilations in the Sun with the AMANDA-II and IceCube detectors
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1112.1840 [astro-ph.HE].
10.1103/PhysRevD.85.042002.
Phys.Rev. D85 (2012) 042002.

40) Searching for soft relativistic jets in Core-collapse Supernovae with the IceCube Optical Follow-up Program
By IceCube and ROTSE Collaborations (R. Abbasi et al.).
arXiv:1111.7030 [astro-ph.HE].
10.1051/0004-6361/201118071.
Astron.Astrophys. 539 (2012) A60.

41) The Design and Performance of IceCube DeepCore
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1109.6096 [astro-ph.IM].
10.1016/j.astropartphys.2012.01.004.
Astropart.Phys. 35 (2012) 615-624.

42) Observation of an Anisotropy in the Galactic Cosmic Ray arrival direction at 400 TeV with IceCube
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1109.1017 [hep-ex].
10.1088/0004-637X/746/1/33.
Astrophys.J. 746 (2012) 33.

43) Searches for periodic neutrino emission from binary systems with 22 and 40 strings of IceCube
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1108.3023 [astro-ph.HE].
10.1088/0004-637X/748/2/118.
Astrophys.J. 748 (2012) 118.

44) IceCube Sensitivity for Low-Energy Neutrinos from Nearby Supernovae
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1108.0171 [astro-ph.HE].
10.1051/0004-6361/201117810, 10.1051/0004-6361/201117810e.
Astron.Astrophys. 535 (2011) A109, Astron.Astrophys. 563 (2014) C1.

45) Neutrino analysis of the September 2010 Crab Nebula flare and time-integrated constraints on neutrino emission from the Crab using IceCube
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1106.3484 [astro-ph.HE].
10.1088/0004-637X/745/1/45.
Astrophys.J. 745 (2012) 45.

46) Observation of Anisotropy in the Arrival Directions of Galactic Cosmic Rays at Multiple Angular Scales with IceCube
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1105.2326 [astro-ph.HE].
10.1088/0004-637X/740/1/16.
Astrophys.J. 740 (2011) 16.

47) A Search for a Diffuse Flux of Astrophysical Muon Neutrinos with the IceCube 40-String Detector
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1104.5187 [astro-ph.HE].
10.1103/PhysRevD.84.082001.
Phys.Rev. D84 (2011) 082001.

48) Time-Dependent Searches for Point Sources of Neutrinos with the 40-String and 22-String Configurations of IceCube
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1104.0075 [astro-ph.HE].
10.1088/0004-637X/744/1/1.
Astrophys.J. 744 (2012) 1.

49) Constraints on the Extremely-high Energy Cosmic Neutrino Flux with the IceCube 2008-2009 Data
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1103.4250 [astro-ph.CO].
10.1103/PhysRevD.84.079902, 10.1103/PhysRevD.83.092003.
Phys.Rev. D83 (2011) 092003, Phys.Rev. D84 (2011) 079902.

50) Background studies for acoustic neutrino detection at the South Pole
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1103.1216 [astro-ph.IM].
10.1016/j.astropartphys.2011.09.004.
Astropart.Phys. 35 (2012) 312-324.

51) Constraints on high-energy neutrino emission from SN 2008D
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1101.3942 [astro-ph.HE].
10.1051/0004-6361/201015770.
Astron.Astrophys. 527 (2011) A28.

52) Search for neutrino-induced cascades with five years of AMANDA data
By R. Abbasi, Y. Abdou, T. Abu-Zayyad, O. Actis, J. Adams, J.A. Aguilar, M. Ahlers, K. Andeen et al..
10.1016/j.astropartphys.2010.10.007.
Astropart.Phys. 34 (2011) 420-430.

53) Search for Dark Matter from the Galactic Halo with the IceCube Neutrino Observatory
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1101.3349 [astro-ph.HE].
10.1103/PhysRevD.84.022004.
Phys.Rev. D84 (2011) 022004.

54) First search for atmospheric and extraterrestrial neutrino-induced cascades with the IceCube detector
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1101.1692 [astro-ph.HE].
10.1103/PhysRevD.84.072001.
Phys.Rev. D84 (2011) 072001.

55) Limits on Neutrino Emission from Gamma-Ray Bursts with the 40 String IceCube Detector
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1101.1448 [astro-ph.HE].
10.1103/PhysRevLett.106.141101.
Phys.Rev.Lett. 106 (2011) 141101.

56) Time-Integrated Searches for Point-like Sources of Neutrinos with the 40-String IceCube Detector
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1012.2137 [astro-ph.HE].
10.1088/0004-637X/732/1/18.
Astrophys.J. 732 (2011) 18.

57) Search for a Lorentz-violating sidereal signal with atmospheric neutrinos in IceCube
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1010.4096 [astro-ph.HE].
10.1103/PhysRevD.82.112003.
Phys.Rev. D82 (2010) 112003.

58) Measurement of the atmospheric neutrino energy spectrum from 100 GeV to 400 TeV with IceCube
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1010.3980 [astro-ph.HE].
10.1103/PhysRevD.83.012001.
Phys.Rev. D83 (2011) 012001.

59) The first search for extremely-high energy cosmogenic neutrinos with the IceCube Neutrino Observatory
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1009.1442 [astro-ph.CO].
10.1103/PhysRevD.82.072003.
Phys.Rev. D82 (2010) 072003.

60) Search for relativistic magnetic monopoles with the AMANDA-II neutrino telescope
By R. Abbasi, Y. Abdou, T. Abu-Zayyad, J. Adams, J.A. Aguilar, M. Ahlers, K. Andeen, J. Auffenberg et al..
10.1140/epjc/s10052-010-1411-6.
Eur.Phys.J. C69 (2010) 361-378.

61) Measurement of the Anisotropy of Cosmic Ray Arrival Directions with IceCube
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1005.2960 [astro-ph.HE].
10.1088/2041-8205/718/2/L194.
Astrophys.J. 718 (2010) L194.

62) The Energy Spectrum of Atmospheric Neutrinos between 2 and 200 TeV with the AMANDA-II Detector
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1004.2357 [astro-ph.HE].
10.1016/j.astropartphys.2010.05.001.
Astropart.Phys. 34 (2010) 48-58.

63) Measurement of Acoustic Attenuation in South Pole Ice
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1004.1694 [astro-ph.IM].
10.1016/j.astropartphys.2010.10.003.
Astropart.Phys. 34 (2011) 382-393.

64) Calibration and Characterization of the IceCube Photomultiplier Tube
By IceCube Collaboration (R. Abbasi et al.).
arXiv:1002.2442 [astro-ph.IM].
10.1016/j.nima.2010.03.102.
Nucl.Instrum.Meth. A618 (2010) 139-152.

65) Extending the search for neutrino point sources with IceCube above the horizon
By IceCube Collaboration (R. Abbasi et al.).
arXiv:0911.2338 [astro-ph.HE].
10.1103/PhysRevLett.103.221102.
Phys.Rev.Lett. 103 (2009) 221102.

66) Limits on a muon flux from Kaluza-Klein dark matter annihilations in the Sun from the IceCube 22-string detector
By IceCube Collaboration (R. Abbasi et al.).
arXiv:0910.4480 [astro-ph.CO].
10.1103/PhysRevD.81.057101.
Phys.Rev. D81 (2010) 057101.

67) Measurement of sound speed vs. depth in South Pole ice for neutrino astronomy
By IceCube Collaboration (R. Abbasi et al.).
arXiv:0909.2629 [astro-ph.IM].
10.1016/j.astropartphys.2010.01.012.
Astropart.Phys. 33 (2010) 277-286.

68) Search for muon neutrinos from Gamma-Ray Bursts with the IceCube neutrino telescope
By IceCube Collaboration (R. Abbasi et al.).
arXiv:0907.2227 [astro-ph.HE].
10.1088/0004-637X/710/1/346.
Astrophys.J. 710 (2010) 346-359.

69) First Neutrino Point-Source Results From the 22-String IceCube Detector
By IceCube Collaboration (R. Abbasi et al.).
arXiv:0905.2253 [astro-ph.HE].
10.1088/0004-637X/701/1/L47.
Astrophys.J. 701 (2009) L47-L51.

70) Limits on a muon flux from neutralino annihilations in the Sun with the IceCube 22-string detector
By IceCube Collaboration (R. Abbasi et al.).
arXiv:0902.2460 [astro-ph.CO].
10.1103/PhysRevLett.102.201302.
Phys.Rev.Lett. 102 (2009) 201302.

71) Determination of the Atmospheric Neutrino Flux and Searches for New Physics with AMANDA-II
By IceCube Collaboration (R. Abbasi et al.).
arXiv:0902.0675 [astro-ph.HE].
10.1103/PhysRevD.79.102005.
Phys.Rev. D79 (2009) 102005.

72) Search for high-energy muon neutrinos from the 'naked-eye' GRB 080319B with the IceCube neutrino telescope
By IceCube Collaboration (R. Abbasi et al.).
arXiv:0902.0131 [astro-ph.HE].
10.1088/0004-637X/708/1/911, 10.1088/0004-637X/701/2/1721.
Astrophys.J. 701 (2009) 1721-1731, Astrophys.J. 708 (2010) 911-912.

73) The IceCube Data Acquisition System: Signal Capture, Digitization, and Timestamping
By IceCube Collaboration (R. Abbasi et al.).
arXiv:0810.4930 [physics.ins-det].
10.1016/j.nima.2009.01.001.
Nucl.Instrum.Meth. A601 (2009) 294-316.

74) Solar Energetic Particle Spectrum on 13 December 2006 Determined by IceTop
By IceCube Collaboration (R. Abbasi et al.).
arXiv:0810.2034 [astro-ph].
10.1086/595679.
Astrophys.J. 689 (2008) L65-L68.

75) Search for Point Sources of High Energy Neutrinos with Final Data from AMANDA-II
By IceCube Collaboration (R. Abbasi et al.).
arXiv:0809.1646 [astro-ph].
10.1103/PhysRevD.79.062001.
Phys.Rev. D79 (2009) 062001.

76) Search for Ultra High-Energy Neutrinos with AMANDA-II
By IceCube Collaboration (M. Ackermann et al.).
arXiv:0711.3022 [astro-ph].
10.1086/527046.
Astrophys.J. 675 (2008) 1014-1024.

77) Detection of Atmospheric Muon Neutrinos with the IceCube 9-String Detector
By IceCube Collaboration (A. Achterberg et al.).
arXiv:0705.1781 [astro-ph].
10.1103/PhysRevD.76.027101.
Phys.Rev. D76 (2007) 027101.

78) Multi-year search for a diffuse flux of muon neutrinos with AMANDA-II
By IceCube Collaboration (A. Achterberg et al.).
arXiv:0705.1315 [astro-ph].
10.1103/PhysRevD.76.042008, 10.1103/PhysRevD.77.089904.
Phys.Rev. D76 (2007) 042008, Phys.Rev. D77 (2008) 089904.

79) The Search for Muon Neutrinos from Northern Hemisphere Gamma-Ray Bursts with AMANDA
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