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CURRICULUM VITAE

I. Personal Data

Citizenship:	German
Place of Birth:	Schwäbisch-Hall, Germany
Office Work Address:	4215 Chamberlin Hall, 1150 University Avenue, University of Wisconsin-Madison, WI 53706
Home Address:	1718 Madison Street, Madison, WI 53711

II. Education

1994	Ph.D., University of Munich, Munich, Germany
1990	Diplom in Physik, University of Munich, Munich, Germany
1983	Baccalaureate in Philosophy, *Hochschule für Philosophie,* Munich, Germany
1979	Abitur, Hohenlohe Gymnasium-Öhringen

III. Employment

2005 - present	Professor of Physics, University of Wisconsin-Madison
2006 - present	IceCube Associate Director, Science and Instrumentation
2003 - 2005	Associate Professor, University of Wisconsin-Madison
1999 - 2003	Assistant Professor, University of Wisconsin-Madison
1997 - 1999	Assistant Scientist, University of Wisconsin-Madison
1995 – 1997	Postdoctoral Researcher, DESY-Zeuthen
1991 – 1994	Research Assistant, Max-Planck Institute for Physics, Munich

IV. Grants and Research Responsibilities

Projects and responsibilities:

IceCube, Associate Director Science and Instrumentation (2005 to present)
IceCube Coordination Committee (Chair)
Previous responsibilities:
- Level 2 Manager, Instrumentation (Technical and Budget, 2003-2005)
- Level 3 Manager: Optical sensors and strings (2001-2004)

IceCube Collaboration
- Institutional Board representative for the University of Wisconsin IceCube group.
- Executive Committee (2005 – present)
- Point source working group coordinator (2005 – 2008)

IceCube Data Analysis (CoPI)

Other projects:

Askaryan Radio Array neutrino observatory at the South Pole. (Collaborative Research) Principal Investigator, Budget $4M (Awarded 2010)

DUSEL Long Baseline Neutrino Experiment (LBNE) Water Cherenkov Detector Research and Development: Responsibility for LBNE PMT testing, design and production plan. (Collaborative Research, Awarded 2009)

V. Training and Supervision

i) Ph.D. students graduated (Advisor)

- Katherine Rawlins, Measuring the Composition of Cosmic Rays with the SPASE and AMANDA Detectors (2001), *Current position: Fellow, Massachusetts Institute of Technology*
- Jodi Cooley, Search for Diffuse High Energy Neutrino Fluxes (2003), *Current position: Post-doc, Stanford University*
- You-Ren Wang, Search for High Energy Point Sources with AMANDA-II (2005)
- Brennan Hughey, Search for Untriggered Bursts of High Energy Neutrino Radiation (2007)
- Raghunath Ganugapati, Measurements of atmospheric muons using AMANDA with emphasis on the prompt component. (2008)
- John Kelley, Determination of the Atmospheric Neutrino Flux with AMANDA-II and Limits on Violation of Lorentz Invariance and Quantum Decoherence (2008), *Current position: Post-doc, Niemegen, Netherlands, LOFAR observatory*
- Erik Strahler, Search for high energy neutrinos from GRBs with IceCube 22 (July 2009), *current position: postdoc at the University Libre Brussels, Belgium*
- James Braun, Search for astrophysical point sources of neutrinos (August 2009), *current position: postdoc at the University of Maryland to work on HAWC*

ii) Ph.D. students current (Advisor)

- Sean Grullon, New event reconstruction methods in IceCube and search for a diffuse astrophysical neutrino flux. (summer 2009)
- Karen Andeen, Mass composition of cosmic rays using AMANDA-II and the surface air shower array SPASE-II
- Laura Gladstone, Neutrino oscillation measurements with IceCube's and its Deep Core instrument
- Chris Weaver, (current research) radio detection of high energy neutrinos
- Jakob van Santen, (current research) Electron and neutral current induced neutrino event reconstruction and flux measurement
- Jakob Feintzeig, (current research) Investigations of optical properties of ice in IceCube

iii) Post-doctoral researchers and scientists

- Hagar Landsman, Postdoc (2004 to present)
- Kotoyo Hoshina, Postdoc (2005 to present)
- David Boersma, Postdoc (2005 to 2008)
- Chihwa Song, Postdoc (2003-2006)
- Dmitry Chirkin, Postdoc (2007-present)

VI . National Committees

- URA Visiting Committee to Fermilab, 2005 to 2008, Assess overall Fermilab Research Program
- South Pole Users Committee, 2000 to 2010, Advisory committee to the National Science Foundation (NSF) and Raytheon Polar Programs, the NSF contractor for Polar Operations
- SCAR, Scientific Committee on Antarctic Research, Executive Committee, 2007 to present.

VII . Departmental Committees

Salary Committee, 2005
Physics Council, 2004 to 2006
Computer Committee, 2001 to 2004
Admissions Committee, 2000 to 2004
Qualifier Committee, 2000 to 2001
Space Committee, 2007 to present
Strategy Committee, 2007 to 2008
Computer Committee, 2008 to present

VII. Teaching

1999 - 2000	Classical Mechanics (Physics 311)
2000 - 2001	Classical Mechanics, Intermediate Physics Lab (Physics 307)
2001 - 2002	Introductory Physics II (E&M, Modern, Physics 208)
2002 - 2003	Special topics: Astroparticle Physics (Graduate course)
2003 - 2004	Introductory Physics II (Physics 208, 202)
2004 - 2005	Introductory Physics II (Physics 202)
2005 - 2006	Introductory Physics II (Physics 202)
2006 - 2007	Introductory Physics II (Physics 202)
2007 - 2008	Introductory Physics II (E&M, Modern, no calculus, Physics 104)
2008 - 2009	Introductory Physics II (E&M, Modern, no calculus, Physics 104)
2009 - 2010	Introductory Physics I (Mechanics, Thermod., w. calculus, Physics 201)

VIII. Honors and Awards

Fellow, American Physical Society 2009

SELECTED TALKS

The Askaryan Radio Array, Open Science Conference at the Scientific Conference for Antarctic Research (SCAR), August 2010, Buenos Aires, Argentina

Topics in ground based observatories, Int. Conference on Technology and Instrumentation in Particle Physics, TIPP 2009, February 2009, Tsukuba, Japan

IceCube, Highlight talk at International Cosmic Ray Conference, ICRC 2009, Lodz, Poland

IceCube, construction status and recent results, ARENA conference 2008, Rome, Italy

IceCube - Performance results of the 22 string detector, 30th International Cosmic Ray Conference, ICRC, Merida, Mexico, 2007

Status of IceCube in 2005, Conference on very large volume neutrino telescopes, VLVnT2, Catania, Italy, 2006

Neutrino Astronomy in Ice, Proc. of Workshop on Neutrino Oscillation Physics (NOW 2006), Otranto, Italy, 2006

Results from AMANDA and Status of IceCube, TeV Astrophysics Workshop, Fermilab, 2005

Results from AMANDA and IceCube status, International Workshop on Cosmic Ray Interactions, Pylos, Greece

Glast Workshop, Stanford Linear Accelerator Laboratory, 2004 (invited talk)

International Cosmic Ray Conference, Tsukuba, Japan, 2003

International Workshop on Neutrino Telescopes, Chiba, Japan, 2003 (invited talk)

International Workshop on Gamma Ray Telescopes, Chicago, 2003 (invited talk)

Conference on High Energy Astrophysics, Santorini, Greece, 2003

High Energy Neutrino Astronomy with AMANDA and IceCube, University College, London, UK, 2003

Conference on Extremely High Energy Cosmic Rays, "High Energy Neutrino Astronomy with AMANDA and IceCube", Tokyo, Japan, 2002

Gamma 2002, "Sensitivity for Neutrino Fluxes from AGN — How Do We Compare to Gamma Ray Fluxes", Chicago, Illinois

International Workshop on Neutrinos and Subterranean Science (NESS), "Neutrino Astronomy with AMANDA", Washington D.C., 2002

International Conference on Weak Interactions, "Results from AMANDA", Christchurch, New Zealand, 2001

PUBLICATIONS IN REFEREED JOURNALS

Recent topics of terrestrial observatories, A. Karle, Nucl. Instrum. Meth. A **623** 75 (2010).

Measurement of the anisotropy of cosmic-ray arrival directions with IceCube, R. Abbasi, et al. (IceCube collaboration), Astrophys. J. **718** L194 (2010); astro-ph.HE/1005.2960

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

Calibration and characterization of the IceCube photomultiplier tube, R. Abbasi, et al. (IceCube collaboration), Nucl. Instrum. Meth. A **618** 139 (2010); astro-ph.IM/1002.2442.

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

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

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

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

Time-dependent point-source search methods in high-energy neutrino astronomy, with J. Braun, et al., Astropart. Phys. **33** 175 (2010); astro-ph.IM/0912.1572 .

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

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

Search for high-energy muon neutrinos from the “naked-eye” GRB 080319B with the IceCube neutrino telescope, R. Abbasi, et al. (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, A. Achterberg et al. (IceCube collaboration), Phys. Rev. D **79** 102005 (2009); astro-ph.HE/0902.0675.

The search for muon neutrinos from Northern Hemisphere gamma-ray bursts with

AMANDA, A. Achterberg et al. (IceCube collaboration and InterPlanetary Network), Astrophys. J. **674** 357 (2008).
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.

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

Methods for point-source analysis in high-energy neutrino telescopes, with J. Braun, et al., Astropart. Phys. **29** 299 (2008); astro-ph/0801.1604.

A radio air shower surface detector as an extension for IceCube and IceTop, with J. Auffenberg, *et al*.; astro-ph/07083331

The IceCube Data Acquisition System: Signal capture, digitization, and time-stamping, IceCube collaboration, Nucl. Instruments and Methods A **601** 294 (2009).

Five years of searches for point sources of astrophysical neutrinos with the AMANDA-II neutrino telescope, Achterberg et al. (IceCube collaboration), Phys. Rev. D **75** 102001 (2007).

Search for ultra–high-energy neutrinos with AMANDA-II, M. Ackerman et al. (IceCube collaboration), Astrophys. Jour. **675** 2 1014 (2008); astro-ph/0711.3022.

Comparison of high energy interaction models used for atmospheric shower simulations above 1 TeV (with G. Battistoni, R. Ganugapati, J.L. Kelley, and T. Montaruli), J. Phys. Conf. Ser. **60** 330 (2007).

Multi-year search for a diffuse flux of muon neutrinos with AMANDA-II, IceCube collaboration, A. Achterberg et al., Phys. Rev. D **76** 042008 (2007); *erratum ibid*. 77 (2008) 089904(E); astro-ph/0705.1315.

Detection of atmospheric muon neutrinos with the IceCube 9-string detector, IceCube collaboration, Phys. Rev. D **76** 027101 (2007); astro-ph/07051781.

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. Jour. **674**:1 357; astro-ph/0705.1186.

Search for neutrino-induced cascades from gamma-ray bursts with AMANDA, IceCube collaboration, A. Achterberg, *et al*., 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, A. Achterberg, *et al*., Phys. Rev. D **75** 102001 (2007); astro-ph/0611063.

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

First year performance of the IceCube Neutrino Telescope, IceCube collaboration, A. Achterberg, *et al*., Astroparticle Physics **26** 155 (2006); astro-ph/0604450.

On the selection of AGN neutrino source candidates for a source stacking analysis with neutrino telescopes, IceCube collaboration, A. Achterberg, *et al*., 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, A. Achterberg, *et al*., Astropart. Phys. **26** 126 (2006).

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

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

The IceCube prototype string in AMANDA, AMANDA collaboration, M. Ackermann, *et al*., Nucl. Instrum. and Meth. A **556** 169 (2006).

Muon flux at the geographical South Pole, (with X. Bai, *et al*), Astropart. Phys. **25** 6 361 (2006); astro-ph/0602381.

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

Flux limits on ultra high energy neutrinos with AMANDA-B10, AMANDA collaboration, M. Ackermann, *et al*., Astropart. Phys. **22** 339 (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).

Search for neutrino-induced cascades with AMANDA, AMANDA collaboration, M. Ackermann, *et al*., Astropart. Phys. **22** 127 (2004).

Search for extraterrestrial point sources of neutrinos with AMANDA-II, AMANDA collaboration, J. Ahrens, *et al*., 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, J. Ahrens, *et al*., Astropart. Phys. **20** 565 (2004).

Calibration and survey of AMANDA with the SPASE detectors, AMANDA/SPASE collaborations, J. Ahrens, *et al*., Nucl. Instr. Meth. A **522** 347 (2004).

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

Sensitivity of the IceCube detector to astrophysical sources of high energy muon neutrinos, IceCube collaboration, J. Ahrens, *et al*., Astropart. Phys. **20** 507 (2004).

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

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

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

Results from AMANDA, AMANDA collaboration, Mod. Phys. Lett. A **17** 2019 (2002).

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

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

Search for supernova neutrino bursts with the AMANDA detector, AMANDA collaboration, J. Ahrens, *et al*., Astropart. Phys. **16** 345 (2002).

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

Fast analog signal transmission for an air Cherenkov photomultiplier camera using optical fibers (with J. Rose, *et al*), Nucl. Instr. Meth. Phys. Res. A **442** 113 (2000).

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

In-situ measurements of optical parameters in Lake Baikal with the help of a neutrino telescope (with V. A. Balkanov, *et al*), Appl. Optics **33** 6818 (1999).

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

Status of the Radio Ice Cherenkov Experiment (RICE) (with C. Allen, *et al*), New Astron. Rev. **42** 319-329 (1998).

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

Optical properties of deep ice at the South Pole — Absorption, AMANDA collaboration, P. Askebejar, *et al*., Appl. Optics **36** 4168 (1997).

The Baikal underwater neutrino telescope: Design, performance and first results, Baikal collaboration, Astropart. Phys. **7** 263 (1997).

Separation of gamma and hadron initiated air showers with energies between 20 and 500 TeV (with F. Arqueros, *et al*), Astropart. Phys. **4** 309 (1996).

Detection of gamma rays above 1 TeV from the Crab Nebula by the second HEGRA imaging atmospheric Cherenkov telescope at La Palma, HEGRA collaboration, Astropart. Phys. **4** 199 (1996).

Search for very high energy gamma radiation from the radio bright region DR4 of the SNR G78.2+2.1 (with C. Prosch, *et al*), Astron. Astrophys. **314** 275 (1996).

Methods to determine the angular resolution of the HEGRA extended air shower scintillator array (with M. Merck, *et al*), Astropart. Phys. **5** 379 (1996).

Monte Carlo simulation of the HEGRA cosmic ray detector performance, HEGRA collaboration, Nucl. Instr. Meth. A **357** 567 (1995).

Design and performance of the angle integrating Cerenkov array AIROBICC (with M. Merck, *et al*), Astropart. Phys. **3** 321 (1995).

A search for gamma radiation above 24 TeV energy from cosmic point sources (with F. Arqueros, *et al*), Astropart. Phys. **4** 1 (1995).

Search for isotropic γ radiation in the cosmological window between 65 and 200 TeV (HEGRA collaboration), Phys. Lett. B **347** 161 (1995).

A new air Cherenkov counter concept for the observation of extended air showers (with E. Lorenz, *et al*), Nucl. Instr. Meth. A **315** 236 (1992).

A conceptual design of a 10^4-km^2 detector for the observation of UHE cosmic rays above 10^{17} eV (with J. Busch, *et al*), Nucl. Phys. Proc. Suppl. **288** 163 (1992).

An ange integrating air Cherenkov counter array for improved gamma/hadron separation in extended air showers (with Bott-Bodenhausen, *et al*), MI-PHE-91-01 (1991).

PUBLICATIONS IN CONFERENCE PROCEEDINGS and PREPRINTS

The Angular Resolution of the HEGRA Scintillation Counter Array at La Palma, *ed. by* J. Matthews, University of Michigan, Ann Arbor, AIP Conf. Proc. A **220**, 127 (1990).

AIROBICC — A New Array of Angle Integrating Cherenkov Counters for Improved Gamma/Hadron-Separation in Extended Air Showers (with M. Bott-Bodenhausen *et al*), *ed. by* J. Matthews (University of Michigan, Ann Arbor), AIP Conf. Proc. A **220** 305 (1990).

Search for Steady and Sporadic Emission from Point Sources above 50 TeV with the HEGRA Array (with M. Merck *et al*), *in* Proc. of the 22nd ICRC, Dublin, Ireland, **11.-13.8** 261 (1991).

A Conceptual Design of a 10^4 km^2 Detector for the Observation of UHE Cosmic Rays above 10^{17} eV (with I. Holl *et al*), Nucl. Phys. B (Proc. Suppl.) **28**, 163 (1992).

A Matrix of Wide Angle Air Cherenkov Counters as an Alternative to Air Cherenkov Telescopes (with I. Holl *et al*), *in* Proc. of the 5th Topical Seminar on Exp. Apparatus for High Energy Particle Physics and Astrophysics (1993), S. Miniato, Italy, **26.-30.4** (1994).

Development of a Novel Atmospheric Cherenkov Detector & Measurements of High Energy Cosmic Radiation Between 15 and 1000 TeV, Ph.D. Thesis in German, MPI-PhE/94-17.

Search for Isotropic γ Radiation Between 65 and 200 TeV: Constraints on Topological Defects and Galactic Dark Matter in the Form of Molecular Hydrogen (HEGRA collaboration, Karle *et al*), MPI-PhE/95-14, *in* Proc. of the 24th ICRC, Rome, Italy, **1** 894 (1995).

Search for γ Radiation above 20 TeV from Supernova Remnants in our Galaxy (with C. Prosch *et al*), MPI-PhE/95-14, *in* Proc. of the 24th ICRC, Rome, Italy, **2** 405 (1995).

Response of the NT-36 Array to a Distant Point-Like Light Source (Baikal collaboration, Karle, *et al*) *in* Proc. of the 24th ICRC, Rome, Italy, **1** 1043 (1995).

Monte-Carlo Simulation of Photon Transport and Detection in Deep Ice: Muons and Cascades, *in* Proc. of the Intl. Workshop on Simulations and Analysis Methods for Large Neutrino Telescopes, Zeuthen, Germany 174 (1998).

Observation of Atmospheric Neutrino Events with AMANDA (AMANDA collaboration, Karle *et al*) *in* Proc. of the 26th ICRC, Salt Lake City HE4.2.05 **2** 221-224 (1999)

Observation of Atmospheric Neutrino Events with the AMANDA Experiment, (AMANDA collaboration, A. Karle *et al*) *in* Proc. of the 17th Intl. Workshop on Weak Interactions and Neutrinos (WIN 99), Cape Town, South Africa 258 (1999), astro-ph/9904379.

Observation of High Energy Atmospheric Neutrinos with AMANDA, *in* Proc. of the 7th Conference on Intersections between Particle and Nuclear Physics (CIPANP 2000), Quebec City, Quebec, *ed by* Z. Parsa and W. Marciano, AIP Conf. Proc. **549** 823 (2000).

Results from AMANDA (AMANDA collaboration, A. Karle, *et al*), *in* Proc. of the 9th Intl. Workshop on Neutrino Telescopes, Venice, Italy *ed by* M. Baldo-Ceolin, Padua U. **2** 569 (2001).

IceCube — The Next Generation Neutrino Telescope at the South Pole (IceCube collaboration, A. Karle, *et al*), *in* Proc of the 20th Intl. Conf. on Neutrino Physics and Astrophysics, Munich, Germany (2002), *ed by* F. von Feilitzsch and N. Schmitz, Nucl. Phys. B (Proc. Suppl) **118** 388 (2003); astro-ph/0209556.

The IceCube High Energy Neutrino Telescope (IceCube collaboration) *in* Proc of the 28th ICRC, Tsukuba HE2.3 1369-1372 (2003).

Observations of high energy neutrinos with water/ice neutrino telescopes, in Proc. of TAUP 2005, Zaragoza, Spain, J. Phys. Conf. Ser. **39** 379 (2006); astro-ph/0602025

IceCube - Performance results of the 22 string detector (IceCube collaboration, Karle *et al.*), *to appear in* Proc. of the 30th ICRC, Merida, Mexico; astro-ph/07110353.

Status of IceCube in 2005 (IceCube collaboration, A. Karle, *et al*) *in* Proc. of VLVnT2, Catania, Italy, Nucl. Instrum. and Methods A **567** 438 (2006); astro-ph/0608139.

Neutrino Astronomy in Ice, Proc. of Workshop on Neutrino Oscillation Physics (NOW 2006), Otranto, Lecce, Italy, September 2006, Nucl. Phys. Proc. Suppl. **168** 232 (2007).

IceCube - Construction Status and First Results, Albrecht Karle, for the IceCube Collaboration, Talk at Conference on Acoustic and Radio EeV Neutrino detection Activities (ARENA) 2008, arXiv:0812.3981