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Education

Ph.D. 1990 : Physics/University of Wisconsin-Madison
M.S. 1985 : Physics/University of Wisconsin-Madison
B.A. 1983 : Physics/Dartmouth College

Employment

2013 — present : Associate Director, Institution for Gravitation and the Cosmos, Penn State
2010 — present : Professor of Physics, Penn State
2010 — present : Professor of Astronomy and Astrophysics, Penn State
2002 — 2010 : Associate Professor of Physics, Penn State
2002 — 2010 : Associate Professor of Astronomy and Astrophysics, Penn State
2001 — 2002 : IceCube Project Science Coordinator, Lead for IceCube Science Operations, and Research Professor of Physics, UW-Madison
1994 — 2002 : Assistant Professor of Physics, U. of Pennsylvania
1993 — 1994 : Senior Research Fellow in Physics, Caltech
1990 — 1993 : Research Fellow in Physics, Caltech
1985 — 1990 : Research Assistant, UW-Madison

Awards

- Institute for Cyberscience Faculty Fellow, Penn State, 2012
- Fulbright Scholar, Humboldt Universität, Berlin, Germany, 2009
- Research Visit Grant, Deutscher Akademischer Austausch Dienst (DAAD), Humboldt Universität, Berlin, Germany, 2008
- Society of Physics Students Teaching Award, Penn State, 2006
- NSF CAREER, 1999
- Outstanding Teaching Assistant, UW-Madison, 1983
- Francis W. Sears Physics Prize, Dartmouth College, 1983
- Sigma Xi Prize, Dartmouth College, 1983
- Phi Beta Kappa, Dartmouth College, 1982
- Rufus Choate Scholar, Dartmouth College, 1982
- Francis L. Town Scientific Prize, Dartmouth College, 1981

Service to profession

- Snowmass 2013 Convener for *Cosmic Frontier: WIMP Dark Matter Indirect Detection (CF2)*.
- NNN12 Program Advisory Committee member, from July 2012 to December 2012.
- KM3NeT Scientific Standing Committee member, December 2010 to December 2012.
- IceCube Collaboration Executive Committee member, August 2007 to May 2013.
- Reviewer of proposals for NSF Particle Astrophysics, DOE High Energy Physics and Canadian NSERC Sub-atomic Physics Program, since 2004.
- Invited thesis committee member for M. Kowalski, Humboldt-Universität, Berlin, Germany, October 2003 to January 2004.
- URA Visiting Committee for Fermilab (Advisory body), March 2003 to March 2005.

Seminars and workshops (and invited talks at professional meetings)

- *Neutrino Physics with IceCube and Its Extensions*, Sungkyunkwan University, S. Korea, International Symposium on Recent Progress in Physics, Nov. 5-7, 2014.
- *The Discovery of Ultrahigh Energy Astrophysical Neutrinos with IceCube*, Bowdoin College, Physics Department, Oct. 30, 2014.
- *Particle Physics with PINGU*, Cornell University, LEPP Journal Club, Mar. 28, 2014.
- *PINGU and the Neutrino Mass Hierarchy*, SLAC National Laboratory, Particle Physics Project Prioritization Panel (P5), Dec. 2-5, 2013.
- *GeV-scale Physics in the South Pole Icecap*, Argonne National Laboratory, Intensity Frontier Workshop IF4: Baryon Number Violation on April 26, 2013.
- *Panelist for Panel Discussion: Inter-Frontier Connections*, Argonne National Laboratory, Intensity Frontier Workshop IF3: Neutrinos on April 26, 2013.
- *Progress on Data Analysis: Low Energy (Neutrino Oscillations, WIMPs)*, UW-Madison, IceCube Scientific Advisory Committee on April 19, 2013.
- *Searches for Neutrinos from Dark Matter*, KICP and PNAS, Sackler Colloquia on Dark Matter Universe: On the Threshold of Discovery on October 19, 2012.
- *IceCube/DeepCore and IceCube/PINGU: Prospects for Few-GeV Scale ? Physics in the Ice*, NuFact 2012 (Williamsburg, VA), NuFact 2012 on July 27, 2012.
- *IceCube/DeepCore and IceCube/PINGU: Prospects for Few-GeV Scale ? Physics in the Ice*, BEACH 2012 (Wichita, KS), BEACH 2012 on July 25, 2012.
- *IceCube's Neutrino Microscope*, Columbia University, Colloquium on April 16, 2012.
- *IceCube's Neutrino Microscope*, Stanford Linear Accelerator Center, Seminar on April 10, 2012.
- *Low Energy Neutrino Workshop Summary*, Ohio State University, Novel Searches for Dark Matter with Neutrino Telescopes Workshop on July 5, 2010.
- *Icy Cold Neutrinos in Three Delicious Flavors*, American Chemical Society National Meeting, American Chemical Society National Meeting, Division of Nuclear Chemistry & Technology on August 18, 2009.
- *Physics with Ice Cube's Deep Core Sub-Array*, University College London, Seminar on June 5, 2009.
- *Physics with Ice Cube's Deep Core Sub-Array*, Imperial College London, Seminar on June 4, 2009.

- *Fundamental Neutrino Physics with IceCube's Deep Core Sub-array*, Max-Planck-Institut fuer Physik, Munich, Germany, Colloquium on May 12, 2009.
- *Fundamental Neutrino Physics with IceCube's Deep Core Sub-array*, University of Erlangen-Nrnberg, Colloquium on May 11, 2009.
- *The Physics Potential of IceCube's Deep Core Sub-Array*, Istituto Veneto di Scienze, Lettere ed Arti, Venice, Italy, XIII International Workshop on Neutrino Telescopes on March 11, 2009.
- *Fundamental Neutrino Physics with IceCube's Deep Core Sub-array*, Johannes-Gutenberg-Universitaet, Institut fuer Physik, Mainz, Germany, Elementarkraefte und mathematische Grundlagen Seminar on January 7, 2009.
- *Particle Physics with the IceCube Deep Core Sub-Array*, DESY/Zeuthen National Laboratory, Berlin, Germany, Experimental High Energy Physics Research Seminar on November 21, 2008.
- *IceCube and Neutrino-Triggered Target of Opportunity Optical Observations*, Penn State, Astronomy and Astrophysics Tuesday Lunch Talk on March 4, 2008.
- *Ultra-high Energy Neutrino Physics with IceCube*, Purdue University, Astrophysics/High Energy Seminar on April 10, 2007.
- *Ultra-high Energy Neutrino Physics with IceCube*, University of Indiana, Particle Physics Seminar on April 9, 2007.
- *Neutrino Astronomy and Particle Physics with the IceCube Detector*, Ohio State University, Center for Cosmology and Astroparticle Physics on April 5, 2007.
- *Tau Neutrino Detection in IceCube*, UW-Madison, Second Workshop on TeV Particle Astrophysics on August 27, 2006.
- *Future Development of the IceCube Detector*, IHEP, Beijing, China, Ultra-high Energy Tau Neutrino Workshop on April 12, 2006.
- *Neutrino Astronomy at the South Pole*, Indiana University of Pennsylvania, Physics and Astronomy Department on February 17, 2006.
- *An Introduction to Neutrino Astronomy at the South Pole*, Penn State, Astronomy and Astrophysics Tuesday Lunch Group on January 31, 2006.
- *IceCube Detector Verification and Commissioning*, UW-Madison, IceCube NSF Review Panel on May 25, 2005.
- *IceCube: First Light*, University of California-Santa Barbara, Kavli Institute for Theoretical Physics on May 12, 2005.
- *AMANDA and IceCube: Large-scale Neutrino Detectors at the South Pole*, Bowdoin College, Physics Department on April 7, 2005.
- *Icefishing for Ultra-high Energy Neutrinos with IceCube*, Bowdoin College, Public Lecture on April 7, 2005.
- *Detectors and Data Acquisition (2 lectures)*, Abdus Salam International Center for Theoretical Physics, Seventh School on Non-Accelerator Astroparticle Physics on July 30, 2004.
- *Solar and Reactor Neutrinos*, Abdus Salam International Center for Theoretical Physics, Seventh School on Non-Accelerator Astroparticle Physics on July 29, 2004.
- *Particle Astrophysics at Penn State*, Penn State, Penn State Society of Physics Students on January 21, 2004.
- *IceCube Detector Verification and Commissioning*, University of Wisconsin, Madison, IceCube Project Advisory Panel on December 18, 2003.

- *IceCube Detector Operating Modes*, University of Maryland, IceCube Collaboration Software Group on August 25, 2003.
- *IceCube InIce and Global Trigger Processors*, University of Maryland, IceCube Collaboration Software Group on August 25, 2003.
- *IceCubism: How and When a Cube Will Capture Cones*, College de France, Paris, High Energy Neutrino Astronomy Workshop on June 17, 2003.
- *IceCube*, NeSS 2002, NeSS 2002/Astrophysics and Cosmology Working Group on September 20, 2002.
- *Recent Results from AMANDA and Prospects for IceCube*, Penn State, Astronomy Department Colloquium in September 2002.
- *Recent Results from AMANDA and Prospects for IceCube*, Cornell University, Particle Physics Seminar in August 2002.
- *Results from the Antarctic Muon and Neutrino Detector Array (AMANDA)*, Max-Planck-Institut fur Physik and Technische Universitat Muenchen, XXth International Conference on Neutrino Physics and Astrophysics (Neutrino 2002) on May 29, 2002.
- *Icefishing for Neutrinos with AMANDA*, Penn State University, Particle Astrophysics Seminar in April 2001.
- *Neutrino Astronomy Deep Down and Way Down Under*, University of Delaware, Physics Department Colloquium in March 2001.
- *Icefishing for Neutrinos with AMANDA*, Lehigh University, Physics Department Colloquium in February 2001.
- *The Sudbury Neutrino Observatory*, University of Minnesota, Physics Department Colloquium in February 2001.
- *Icefishing for Neutrinos with AMANDA*, Drexel University, Physics Department Colloquium in February 2001.
- *Icefishing for Neutrinos with AMANDA*, Brookhaven National Lab, Particle Physics Seminar in November 2000.
- *Icefishing for Neutrinos with AMANDA*, University of Maryland, Particle Physics Seminar in October 2000.
- *Recent Results from AMANDA*, American Physical Society, Division of Particles and Fields in August 2000.
- *Recent Results from AMANDA*, ICHEP-2000, International Conference on High Energy Physics in July 2000.
- *Icefishing for Neutrinos with AMANDA*, Temple University, Physics Department Colloquium in May 2000.
- *Status of the SNO Experiment*, APS Meeting, American Physical Society Meeting in April 2000.
- *Icefishing for Neutrinos with AMANDA*, Cornell University, Particle Physics Seminar in August 1999.
- *Solar and Atmospheric Neutrinos*, National Academy of Sciences and Humboldt Foundation, German-American Frontiers of Science in June 1999.
- *The Sudbury Neutrino Observatory and the Solar Neutrino Opportunity*, University of Michigan, High Energy Physics Seminar in March 1999.

- *The Sudbury Neutrino Observatory and the Solar Neutrino Opportunity*, Temple University, Physics Department Colloquium in November 1998.
- *The Sudbury Observatory and the Solar Neutrino Opportunity*, UC-Santa Cruz, High Energy Physics Seminar in September 1998.
- *The Sudbury Neutrino Observatory and the Solar Neutrino Opportunity*, Stanford Linear Accelerator Center, High Energy Physics Seminar in September 1998.
- *The Sudbury Neutrino Observatory and the Solar Neutrino Opportunity*, University of Kansas, Physic Department Colloquium in August 1998.
- *Data Acquisition Electronics for IceCube*, UC-Irvine, IceCube Workshop in March 1998.
- *Exploiting the Solar Neutrino Opportunity: Second Generation Solar Neutrino Detectors*, Bryn Mawr College, Physics Department Colloquium in November 1997.
- *The Sudbury Neutrino Observatory and the Solar Neutrino Opportunity*, University of Delaware/Bartol Institute, High Energy Physics Seminar in February 1997.
- *The Sudbury Neutrino Observatory and the Solar Neutrino Opportunity*, University of Pittsburgh, High Energy Physics Seminar in February 1997.
- *The Sudbury Neutrino Observatory and the Solar Neutrino Opportunity*, Princeton University, High Energy Physics Seminar in February 1997.
- *Exploiting the Solar Neutrino Opportunity: Second Generation Solar Neutrino Detectors*, Cornell University, Physics Department Colloquium in January 1997.
- *The Design and Status of the Sudbury Neutrino Observatory*, 18th Texas Symp. on Relativistic Astrophysics, 18th Texas Symposium on Relativistic Astrophysics in December 1996.
- *The Solar Neutrino Opportunity*, Cornell University (APS), New York State American Physical Society 75th Topical Symposium in October 1996.
- *Massive Neutrinos and the Sudbury Neutrino Observatory*, Cornell University, High Energy Physics Seminar in May 1996.
- *Massive Neutrinos and the Sudbury Neutrino Observatory*, Caltech, High Energy Physics Seminar in April 1996.
- *Massive Neutrinos and the Sudbury Neutrino Observatory*, UC-San Diego, High Energy Physics Seminar in April 1996.
- *The SNO Data Acquisition System*, Paris Conf. on Electronics for High Energy Neutrino Detectors, Paris Conference on Electronics for High Energy Neutrino Detectors in March 1996.
- *Massive Neutrinos and the Sudbury Neutrino Observatory*, Rutgers University, High Energy Physics Seminar in February 1996.
- *Status of the SNO Experiment*, Paris Conf. on Electronics for High Energy Neutrino Detectors, Paris Conference on Electronics for High Energy Neutrino Detectors in January 1996.
- *Recent Results in Tau Physics from CLEO-II*, Lake Louise Winter Institute, Lake Louise Winter Institute in February 1994.
- *The CLEO-II Limit on $M(\text{nutau})$ and Prospects for Its Improvement*, Stanford, SLAC Tuesday Seminar in November 1993.
- *The CLEO-II Limit on $M(\text{nutau})$ and Prospects for Its Improvement*, 3rd Workshop on the Tau Charm Factory, Third Workshop on the Tau Charm Factory in June 1993.

- *Studies of Radiation Damage to CAMEX64 Preamplifiers Exposed to Gamma-rays at the Cornell High Energy Synchrotron Source*, IEEE Nuclear Science Symposium, Poster Session in October 1992.
- *A Limit on the Tau Neutrino Mass*, Ohio State, 2nd Workshop on Tau Lepton Physics in September 1992.
- *The Tau Neutrino Mass at CLEO-II*, UCLA, 2nd UCLA International Conference on Gamma Ray and Neutrino Cosmology in February 1992.
- *Tau Physics at CLEO-II*, Aspen Winter Physics Conf. on Elementary Particle Physics, Aspen Winter Physics Conference on Elementary Particle Physics in January 1992.
- *Limits on the Production of Neutral SUSY Higgs Bosons from Z0 Decays*, APS, Meeting of the American Physical Society on April 16, 1990.
- *Limits on the Production of Charged Higgs Bosons from Z0*, APS, Meeting of the American Physical Society on April 16, 1990.
- *Gating in the ALEPH Time Projection Chamber*, IVth Int. Wire Chamber Conf., IVth International Wire Chamber Conference in February 1986.

Teaching

- PHYS 213: General Physics: Fluids & Thermal Physics, Fall 2003, 404 students.
- PHYS 214: General Physics: Wave Motion & Quantum Physics, Fall 2003, 583 students.
- PHYS 496: Independent Studies, Fall 2003, 1 students.
- PHYS 600: Thesis Research, Fall 2003, 1 students.
- PHYS 213: General Physics: Fluids & Thermal Physics, Spring 2003, 372 students.
- PHYS 214: General Physics: Wave Motion & Quantum Physics, Spring 2003, 447 students.
- PHYS 214: General Physics: Wave Motion & Quantum Physics, Fall 2005, 489 students.
- PHYS 213: General Physics: Fluids & Thermal Physics, Fall 2005, 398 students.
- PHYS 213: General Physics: Fluids & Thermal Physics, Fall 2006, students.
- PHYS 214: General Physics: Wave Motion & Quantum Physics, Fall 2006, students.
- PHYS 212: General Physics: Electricity & Magnetism, Fall 2007, 913 students.
- PHYS 211: General Physics: Mechanics, Fall 2009, students.
- PHYS 237: Modern Physics, Fall 2010, students.
- PHYS 237: Modern Physics, Fall 2011, students.
- PHYS 237: Modern Physics, Spring 2011, students.
- PHYS 237H: Honors Modern Physics, Spring 2011, students.
- PHYS 211: General Physics: Mechanics, Fall 2012, students.
- PHYS 237: Modern Physics, Spring 2012, students.
- PHYS 237H: Honors Modern Physics, Spring 2012, students.
- PHYS 212: General Physics: Electricity & Magnetism, Spring 2013, students.
- PHYS 211: General Physics: Mechanics, Spring 2014, students.

Research Grants and Contracts: Funded

- National Science Foundation, *The Astrophysical Multimessenger Observatory Network*, \$384,373, from June 2014 to May 2017 (with D. Fox and M. Mostafá).
- National Science Foundation, *Neutrino Physics and Astrophysics with IceCube Data*, \$1,132,348, from August 2012 to July 2015 (with T. DeYoung).
- National Science Foundation, *Maintenance and Operation of IceCube 2010-2011*, \$33,955, from October 2010 to September 2011 (with T. DeYoung).
- National Science Foundation, *IceCube Year 9*, \$146,715, from April 2010 to March 2011 (with T. DeYoung).
- National Science Foundation, *Neutrino Physics and Astrophysics with IceCube Data*, \$963,261, from August 2009 to July 2012 (with T. DeYoung).
- National Science Foundation, *Maintenance and Operation of IceCube 2008-2009*, \$92,637, from October 2008 to September 2009 (with T. DeYoung).
- National Science Foundation, *IceCube Year 6*, \$457,167, from April 2007 to March 2008 (with T. DeYoung).
- National Science Foundation, *Maintenance and Operation of IceCube 2007*, \$83,166, from April 2007 to September 2007 (with T. DeYoung).
- National Science Foundation, *Analysis of IceCube Data*, \$750,000, from July 2006 to June 2009.
- National Science Foundation, *IceCube Year 5*, \$766,140, from April 2006 to March 2007.
- National Science Foundation, *IceCube Year 4*, \$692,582, from April 2005 to March 2006.
- National Science Foundation, *IceCube Year 3*, \$818,049, from April 2004 to March 2005.
- National Science Foundation, *Searches for Ultrahigh Energy Neutrinos with AMANDA*, \$450,000, from August 2003 to July 2006.
- National Aeronautics and Space Administration, *ANITA: Antarctic Impulsive Transient Antenna*, \$1,010,000, from April 2003 to September 2008.
- National Science Foundation, *IceCube Year 2*, \$350,000, from April 2003 to March 2004.
- National Science Foundation, *IceCube Startup Phase*, \$35,300, from August 2002 to July 2003.
- National Science Foundation, *The Search for Ultrahigh Energy Neutrinos and an Improved Readout System for AMANDA*, \$359,477, from June 1999 to May 2003.

Other research or creative accomplishments

- Radio broadcast on local NPR station recorded at South Pole., March 2006.

New courses and teaching methods

- PHYS 211/212: General Physics: Interactive teaching, improved assessment, 2012–present.
- PHYS 214: General Physics: Wave Motion & Quantum Physics, Honors Option, September 2003 to December 2003.
- PHYS 214: General Physics: Wave Motion & Quantum Physics, Lecture demonstration upgrade, September 2003 to December 2003.
- PHYS 214: General Physics: Wave Motion & Quantum Physics, Schreyer Institute Grant Proposal, June 2003 to December 2003.

- PHYS 213: General Physics: Fluids & Thermal Physics, Physics 213 Honors Option, September 2005 to December 2005.
- PSU 016 (S.350): First Year Seminar, Particle Astrophysics lecture for First Year Seminar, since April 2008.

Academic advising

- Undergraduate honors thesis advisor of: D. Atlee, L. Boyer, J. Hart, D. Lutton, P. Roth, T. Salameh, V. A. Viscomi and A. Weinrich.
- Mentor of the following first-year graduate students: A. Hucke, A. Idrisy, D. Landy, B. Robbins, M. Saika and S. Wood.
- Thesis committee advisor of: I. Taboada, S. Movit, D. L. Rutledge, M. Dunkman, F. Huang, J. Lanfranchi, D. Pankova.
- Thesis committee member of: S. Gao, W. Wright

Students and Postdocs

- 2013 – 2014 : T. Anderson, Postdoctoral Researcher
- 2013 – 2014 : J.P.A.M. de Andre, Postdoctoral Researcher
- 2013 – present : T. Arlen, Postdoctoral Researcher
- 2014 – present : A. Keivani, Postdoctoral Researcher
- 2012 – present : G. Tešić, Postdoctoral Researcher
- 2013 – present : F. Huang, Graduate Student
- 2014 – present : J. Lanfranchi, Graduate Student
- 2014 – present : D. Pankova, Graduate Student
- 2013 – present : D. Lutton, Undergraduate Researcher
- 2013 – present : M. Quinnan, Undergraduate Researcher
- 2013 – 2014 : C. Contreras, undergraduate Researcher
- 2013 – 2014 : J. Groh, Undergraduate Researcher (alumnus)
- 2013 – 2014 : Z. Snyder, Undergraduate Researcher (alumnus)
- 2013 – 2014 : N. Stanisha, Undergraduate Researcher (alumnus)
- 2010 – 2011 : L. Boyer, Undergraduate Researcher (alumnus)
- 2010 – 2012 : R. Wasserman, Undergraduate Researcher (alumnus)
- 2010 – 2011 : K. S. Caballero Mora, Postdoctoral Researcher (alumnus)
- 2008 – 2011 : L. Bradley, Undergraduate Researcher (alumnus)
- 2008 – 2013 : D. Koskinen, Postdoctoral Researcher (alumnus)
- 2008 – 2010 : S. J. Lafebre, Postdoctoral Researcher (alumnus)
- 2007 – 2008 : R. Hill, Undergraduate Student (alumnus)
- 2007 – 2008 : G. Stephens, Undergraduate Student (alumnus)
- 2007 – 2010 : D. Grant, Postdoctoral Researcher (alumnus)
- 2006 – 2008 : V. A. Viscomi, Undergraduate Student (alumnus)

- 2006 – 2011 : M. M. Foerster, Undergraduate Researcher (alumnus)
- 2006 – 2011 : C. Ha, Graduate Student, (alumnus)
- 2006 – 2008 : B. Robbins, Graduate Student (alumnus)
- 2005 – 2009 : B. Fox, Postdoctoral Researcher (alumnus)
- 2005 – 2005 : E. O. Smith, Undergraduate Student (alumnus)
- 2005 – 2005 : K. R. Coughlin, Undergraduate Student (alumnus)
- 2005 – 2008 : C. Rott, Postdoctoral Researcher (alumnus)
- 2004 – 2010 : P. Toale, Postdoctoral Researcher (alumnus)
- 2004 – 2007 : J. Hart, Undergraduate Student (alumnus)
- 2004 – 2011 : S. Movit, Graduate Student (alumnus)
- 2004 – 2004 : L. Voicu, Research Fac/Staff (alumnus)
- 2004 – 2004 : J. Fenstermacher, Undergraduate Student (alumnus)
- 2004 – 2004 : L. A. Rutter, Undergraduate Student (alumnus)
- 2004 – 2007 : S. Seo, Postdoctoral Researcher (alumnus)
- 2004 – 2004 : D. Krebs, Undergraduate Student (alumnus)
- 2004 – 2008 : D. Williams, Postdoctoral Researcher (alumnus)
- 2004 – 2005 : M. Greene, Postdoctoral Researcher (alumnus)
- 2003 – 2004 : K. J. Palladino, Graduate Student (alumnus)
- 2003 – 2003 : J. Carpenter, Undergraduate Student (alumnus)
- 2003 – 2004 : J. Coarasa Perez (USA), Postdoctoral Researcher (alumnus)
- 2003 – 2004 : M. Crowl, Undergraduate Student (alumnus)
- 2003 – 2006 : M. Kestel, Postdoctoral Researcher (alumnus)
- 2003 – 2004 : R. Nichol, Postdoctoral Researcher (alumnus)
- 2003 – 2011 : D. L. Rutledge, Graduate Student (alumnus)
- 2003 – 2004 : P. Roth, Undergraduate Student (alumnus)
- 2003 – 2005 : Q. Q. Taylor, Undergraduate Student (alumnus)
- 2002 – 2003 : B. P. Collin, Postdoctoral Researcher (alumnus)
- 2002 – 2003 : S. Jaminion, Postdoctoral Researcher (alumnus)
- 2002 – 2006 : D. Atlee, Undergraduate Student (alumnus)

Service: committees, etc.

- Member of Undergraduate Program committee, June 2013 to May 2014.
- Member of Introductory Courses committee, June 2013 to May 2014.
- Member of Promotion and Tenure committee, May 2013 to April 2014.
- Member of Peer Evaluation committee, March 2013.
- Member of Search committee, September 2012 to June 2013.
- Member of Promotion and Tenure committee, July 2012 to June 2013.
- Member of Peer Evaluation committee, June 2012 to May 2013.

- Member of Search committee, September 2011 to August 2013.
- Member of Promotion and Tenure committee, September 2011 to September 2012.
- Member of Undergraduate Program committee, June 2011 to May 2013.
- Chair of Introductory Courses committee, May 2011 to May 2013.
- Member of Undergraduate Program committee, June 2010 to May 2011.
- Member of Graduate Recruiting committee, February 2010
- Member of Peer Evaluation committee, January 2010 to February 2010.
- Member of Undergraduate Program committee, June 2009 to May 2010.
- Member of Introductory Courses committee, June 2009 to May 2010.
- Member of Graduate Recruiting committee, June 2009 to May 2010.
- Member of Peer Evaluation committee, March 2008 to April 2008.
- Mentor of First-year Graduate Student, September 2007 to September 2008.
- Member of Graduate Program & Candidacy committee, June 2007 to May 2008.
- Member of Introductory Courses committee, June 2007 to May 2008.
- Member of Peer Evaluation committee, June 2007 to May 2008.
- Member of Introductory Courses committee, June 2006 to May 2007.
- Member of Graduate Program & Candidacy committee, June 2006 to May 2007.
- Chair of Climate committee, June 2005 to May 2006.
- Member of Search committee, June 2005 to May 2006.
- Member of Graduate Recruiting committee, January 2005 to February 2005.
- Member of Elementary Particles and Fields committee, June 2004 to May 2005.
- Chair of Climate committee, June 2004 to May 2005.
- Undergraduate (Student Services), September 2003
- Chair of Climate committee, June 2003 to May 2004.
- Member of Introductory Courses committee, February 2003 to June 2003.
- Chair of Climate committee, June 2002 to May 2003.
- Member of Elementary Particles and Fields committee, June 2002 to May 2003.

Public service

- Physics and Astronomy for Women (PAW), founder and faculty advisor, since 2003.
- School Teachers' Workshop in Particle Astrophysics, since July 2004. Co-Run week-long for-credit course on particle astrophysics for high school science teachers.
- Society of Physics Students ZONE Meeting Speaker, April 2008.
- With physics department lecturer Mr. John Hopkins, organized physics demonstrations at local public schools., 2006-2007.
- Performed several physics demonstrations at local public schools., 2006-2007.
- Neutrino Astronomy (talk given to Central PA Observers Amateur Astronomy Club), January 2005.
- Centre County Community Energy Project (Advisory body), April 2008.

ArXiv Papers and Papers Under Review

1. **“Searches for small-scale anisotropies from neutrino point sources with three years of IceCube data”**
M. G. Aartsen *et al.* [IceCube Collaboration].
arXiv:1408.0634 [astro-ph.HE]
2. **“Multimessenger Search for Sources of Gravitational Waves and High-Energy Neutrinos: Results for Initial LIGO-Virgo and IceCube”**
M. G. Aartsen *et al.* [IceCube and LIGO Scientific and Virgo Collaborations].
arXiv:1407.1042 [astro-ph.HE]
3. **“Multipole analysis of IceCube data to search for dark matter accumulated in the Galactic halo”**
M. G. Aartsen *et al.* [IceCube Collaboration].
arXiv:1406.6868 [astro-ph.HE]
4. **“Searches for Extended and Point-like Neutrino Sources with Four Years of IceCube Data”**
M. G. Aartsen *et al.* [IceCube Collaboration].
arXiv:1406.6757 [astro-ph.HE]
5. **“Observation of High-Energy Astrophysical Neutrinos in Three Years of IceCube Data”**
M. G. Aartsen *et al.* [IceCube Collaboration].
arXiv:1405.5303 [astro-ph.HE]
6. **“Search for non-relativistic Magnetic Monopoles with IceCube”**
M. G. Aartsen *et al.* [IceCube Collaboration].
arXiv:1402.3460 [astro-ph.CO]
10.1140/epjc/s10052-014-2938-8
7. **“Planning the Future of U.S. Particle Physics (Snowmass 2013): Chapter 4: Cosmic Frontier”**
J. L. Feng, S. Ritz, J. J. Beatty, J. Buckley, D. F. Cowen, P. Cushman, S. Dodelson and C. Galbiati *et al.*.
arXiv:1401.6085 [hep-ex]
8. **“Letter of Intent: The Precision IceCube Next Generation Upgrade (PINGU)”**
M. G. Aartsen *et al.* [IceCube-PINGU Collaboration].
arXiv:1401.2046 [physics.ins-det]
9. **“Search for time-independent neutrino emission from astrophysical sources with 3 years of IceCube data”** M. G. Aartsen *et al.* [IceCube Collaboration]. arXiv:1307.6669 [astro-ph.HE]

Refereed Publications

1. **“Probing the origin of cosmic-rays with extremely high energy neutrinos using the IceCube Observatory”** M. G. Aartsen *et al.* [IceCube Collaboration]. arXiv:1310.5477 [astro-ph.HE]
Phys. Rev. D **88**, 112008 (2013)
2. **“Measurement of Atmospheric Neutrino Oscillations with IceCube”** M. G. Aartsen *et al.* [IceCube Collaboration]. arXiv:1305.3909 [hep-ex] 10.1103/PhysRevLett.111.081801
Phys. Rev. Lett. **111**, 081801 (2013)
3. **“First observation of PeV-energy neutrinos with IceCube”** M. G. Aartsen *et al.* [IceCube Collaboration]. arXiv:1304.5356 [astro-ph.HE] 10.1103/PhysRevLett.111.021103
Phys. Rev. Lett. **111**, 021103 (2013)
4. **“Measurement of South Pole ice transparency with the IceCube LED calibration system”** M. G. Aartsen *et al.* [IceCube Collaboration]. arXiv:1301.5361 [astro-ph.IM] 10.1016/j.nima.2013.01.054
Nucl. Instrum. Meth. A **711**, 73 (2013)
5. **“Measurement of the Atmospheric ν_e flux in IceCube”** M. G. Aartsen *et al.* [IceCube Collaboration]. arXiv:1212.4760 [hep-ex] 10.1103/PhysRevLett.110.151105
Phys. Rev. Lett. **110**, no. 15, 151105 (2013)
6. **“Search for dark matter annihilations in the Sun with the 79-string IceCube detector”** M. G. Aartsen *et al.* [IceCube Collaboration]. arXiv:1212.4097 [astro-ph.HE] 10.1103/PhysRevLett.110.131302
Phys. Rev. Lett. **110**, 131302 (2013)
7. **“The Astrophysical Multimessenger Observatory Network (AMON)”** M. W. E. Smith, D. B. Fox, D. F. Cowen, P. Meszaros, G. Tesic, J. Fixelle, I. Bartos and P. Sommers *et al.*. arXiv:1211.5602 [astro-ph.HE] 10.1016/j.astropartphys.2013.03.003
Astropart. Phys. **45**, 56 (2013)
8. **“Search for Galactic PeV Gamma Rays with the IceCube Neutrino Observatory”** M. G. Aartsen *et al.* [IceCube Collaboration]. arXiv:1210.7992 [astro-ph.HE] 10.1103/PhysRevD.87.062002
Phys. Rev. D **87**, no. 6, 062002 (2013)
9. **“Observation of Cosmic Ray Anisotropy with the IceTop Air Shower Array”** M. G. Aartsen *et al.* [IceCube Collaboration]. arXiv:1210.5278 [astro-ph.HE] 10.1088/0004-637X/765/1/55
Astrophys. J. **765**, 55 (2013)
10. **“Searches for high-energy neutrino emission in the Galaxy with the combined IceCube-AMANDA detector”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1210.3273 [astro-ph.HE] 10.1088/0004-637X/763/1/33
Astrophys. J. **763**, 33 (2013)
11. **“Search for Relativistic Magnetic Monopoles with IceCube”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1208.4861 [astro-ph.HE] 10.1103/PhysRevD.87.022001
Phys. Rev. D **87**, 022001 (2013)
12. **“An improved method for measuring muon energy using the truncated mean of dE/dx ”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1208.3430 [physics.data-an] 10.1016/j.nima.2012.11.081
Nucl. Instrum. Meth. A **703**, 190 (2013)

13. **“Lateral Distribution of Muons in IceCube Cosmic Ray Events”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1208.2979 [astro-ph.HE] 10.1103/PhysRevD.87.012005 Phys. Rev. D **87**, 012005 (2013)
14. **“IceTop: The surface component of IceCube”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1207.6326 [astro-ph.IM] 10.1016/j.nima.2012.10.067 Nucl. Instrum. Meth. A **700**, 188 (2013)
15. **“Cosmic Ray Composition and Energy Spectrum from 1-30 PeV Using the 40-String Configuration of IceTop and IceCube”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1207.3455 [astro-ph.HE] 10.1016/j.astropartphys.2012.11.003 Astropart. Phys. **42**, 15 (2013)
16. **“Use of event-level neutrino telescope data in global fits for theories of new physics”** P. Scott *et al.* [IceCube Collaboration]. arXiv:1207.0810 [hep-ph] 10.1088/1475-7516/2012/11/057 JCAP **1211**, 057 (2012)
17. **“An absence of neutrinos associated with cosmic-ray acceleration in γ -ray bursts”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1204.4219 [astro-ph.HE] 10.1038/nature11068 Nature **484**, 351 (2012)
18. **“A Search for UHE Tau Neutrinos with IceCube”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1202.4564 [astro-ph.HE] 10.1103/PhysRevD.86.022005 Phys. Rev. D **86**, 022005 (2012)
19. **“All-particle cosmic ray energy spectrum measured with 26 IceTop stations”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1202.3039 [astro-ph.HE] 10.1016/j.astropartphys.2013.01.016 Astropart. Phys. **44**, 40 (2013)
20. **“Multi-year search for dark matter annihilations in the Sun with the AMANDA-II and IceCube detectors”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1112.1840 [astro-ph.HE] 10.1103/PhysRevD.85.042002 Phys. Rev. D **85**, 042002 (2012)
21. **“Searching for soft relativistic jets in Core-collapse Supernovae with the IceCube Optical Follow-up Program”** R. Abbasi *et al.* [IceCube and ROTSE Collaborations]. arXiv:1111.7030 [astro-ph.HE] 10.1051/0004-6361/201118071 Astron. Astrophys. **539**, A60 (2012)
22. **“The Design and Performance of IceCube DeepCore”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1109.6096 [astro-ph.IM] 10.1016/j.astropartphys.2012.01.004 Astropart. Phys. **35**, 615 (2012)
23. **“Observation of an Anisotropy in the Galactic Cosmic Ray arrival direction at 400 TeV with IceCube”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1109.1017 [hep-ex] 10.1088/0004-637X/746/1/33 Astrophys. J. **746**, 33 (2012)
24. **“Searches for periodic neutrino emission from binary systems with 22 and 40 strings of IceCube”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1108.3023 [astro-ph.HE] 10.1088/0004-637X/748/2/118 Astrophys. J. **748**, 118 (2012)

25. **“IceCube Sensitivity for Low-Energy Neutrinos from Nearby Supernovae”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1108.0171 [astro-ph.HE] 10.1051/0004-6361/201117810 Astron. Astrophys. **535**, A109 (2011)
26. **“Neutrino analysis of the September 2010 Crab Nebula flare and time-integrated constraints on neutrino emission from the Crab using IceCube”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1106.3484 [astro-ph.HE] 10.1088/0004-637X/745/1/45 Astrophys. J. **745**, 45 (2012)
27. **“A Search for the Dark Matter Annual Modulation in South Pole Ice”** J. Chervinka, R. Co, D. F. Cowen, D. Grant, F. Halzen, K. M. Heeger, L. Hsu and A. Karle *et al.*. arXiv:1106.1156 [astro-ph.HE] 10.1016/j.astropartphys.2012.03.003 Astropart. Phys. **35**, 749 (2012)
28. **“Observation of Anisotropy in the Arrival Directions of Galactic Cosmic Rays at Multiple Angular Scales with IceCube”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1105.2326 [astro-ph.HE] 10.1088/0004-637X/740/1/16 Astrophys. J. **740**, 16 (2011)
29. **“A Search for a Diffuse Flux of Astrophysical Muon Neutrinos with the IceCube 40-String Detector”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1104.5187 [astro-ph.HE] 10.1103/PhysRevD.84.082001 Phys. Rev. D **84**, 082001 (2011)
30. **“Time-Dependent Searches for Point Sources of Neutrinos with the 40-String and 22-String Configurations of IceCube”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1104.0075 [astro-ph.HE] 10.1088/0004-637X/744/1/1 Astrophys. J. **744**, 1 (2012)
31. **“Constraints on the Extremely-high Energy Cosmic Neutrino Flux with the IceCube 2008-2009 Data”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1103.4250 [astro-ph.CO] 10.1103/PhysRevD.84.079902, 10.1103/PhysRevD.83.092003 Phys. Rev. D **83**, 092003 (2011), [Erratum-ibid. D **84**, 079902 (2011)]
32. **“Background studies for acoustic neutrino detection at the South Pole”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1103.1216 [astro-ph.IM] 10.1016/j.astropartphys.2011.09.004 Astropart. Phys. **35**, 312 (2012)
33. **“Constraints on high-energy neutrino emission from SN 2008D”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1101.3942 [astro-ph.HE] 10.1051/0004-6361/201015770 Astron. Astrophys. **527**, A28 (2011)
34. **“Search for neutrino-induced cascades with five years of AMANDA data”** R. Abbasi, Y. Abdou, T. Abu-Zayyad, O. Actis, J. Adams, J. A. Aguilar, M. Ahlers and K. Andeen *et al.*. 10.1016/j.astropartphys.2010.10.007 Astropart. Phys. **34**, 420 (2011).
35. **“Search for Dark Matter from the Galactic Halo with the IceCube Neutrino Observatory”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1101.3349 [astro-ph.HE] 10.1103/PhysRevD.84.022004 Phys. Rev. D **84**, 022004 (2011)
36. **“First search for atmospheric and extraterrestrial neutrino-induced cascades with the IceCube detector”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1101.1692 [astro-ph.HE] 10.1103/PhysRevD.84.072001 Phys. Rev. D **84**, 072001 (2011)

37. **“Limits on Neutrino Emission from Gamma-Ray Bursts with the 40 String IceCube Detector”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1101.1448 [astro-ph.HE] 10.1103/PhysRevLett.106.141101 Phys. Rev. Lett. **106**, 141101 (2011)
38. **“Time-Integrated Searches for Point-like Sources of Neutrinos with the 40-String IceCube Detector”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1012.2137 [astro-ph.HE] 10.1088/0004-637X/732/1/18 Astrophys. J. **732**, 18 (2011)
39. **“Search for a Lorentz-violating sidereal signal with atmospheric neutrinos in IceCube”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1010.4096 [astro-ph.HE] 10.1103/PhysRevD.82.112003 Phys. Rev. D **82**, 112003 (2010)
40. **“Measurement of the atmospheric neutrino energy spectrum from 100 GeV to 400 TeV with IceCube”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1010.3980 [astro-ph.HE] 10.1103/PhysRevD.83.012001 Phys. Rev. D **83**, 012001 (2011)
41. **“The first search for extremely-high energy cosmogenic neutrinos with the IceCube Neutrino Observatory”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1009.1442 [astro-ph.CO] 10.1103/PhysRevD.82.072003 Phys. Rev. D **82**, 072003 (2010)
42. **“Search for relativistic magnetic monopoles with the AMANDA-II neutrino telescope”** R. Abbasi, Y. Abdou, T. Abu-Zayyad, J. Adams, J. A. Aguilar, M. Ahlers, K. Andeen and J. Auffenberg *et al.*. 10.1140/epjc/s10052-010-1411-6 Eur. Phys. J. C **69**, 361 (2010).
43. **“Measurement of the Anisotropy of Cosmic Ray Arrival Directions with IceCube”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1005.2960 [astro-ph.HE] 10.1088/2041-8205/718/2/L194 Astrophys. J. **718**, L194 (2010)
44. **“IceCube: A multipurpose neutrino telescope”** K. Rawlins *et al.* [IceCube Collaboration]. 10.1143/JPSJS.77SB.71 J. Phys. Soc. Jap. Suppl. **77B**, 71 (2008).
45. **“The Energy Spectrum of Atmospheric Neutrinos between 2 and 200 TeV with the AMANDA-II Detector”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1004.2357 [astro-ph.HE] 10.1016/j.astropartphys.2010.05.001 Astropart. Phys. **34**, 48 (2010)
46. **“Measurement of Acoustic Attenuation in South Pole Ice”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1004.1694 [astro-ph.IM] 10.1016/j.astropartphys.2010.10.003 Astropart. Phys. **34**, 382 (2011)
47. **“Calibration and Characterization of the IceCube Photomultiplier Tube”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:1002.2442 [astro-ph.IM] 10.1016/j.nima.2010.03.102 Nucl. Instrum. Meth. A **618**, 139 (2010)
48. **“Extending the search for neutrino point sources with IceCube above the horizon”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:0911.2338 [astro-ph.HE] 10.1103/PhysRevLett.103.221102 Phys. Rev. Lett. **103**, 221102 (2009)
49. **“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]. arXiv:0910.4480 [astro-ph.CO] 10.1103/PhysRevD.81.057101 Phys. Rev. D **81**, 057101 (2010)

50. **“Measurement of sound speed vs. depth in South Pole ice for neutrino astronomy”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:0909.2629 [astro-ph.IM] 10.1016/j.astropartphys.2010.01.007 Astropart. Phys. **33**, 277 (2010)
51. **“Search for muon neutrinos from Gamma-Ray Bursts with the IceCube neutrino telescope”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:0907.2227 [astro-ph.HE] 10.1088/0004-637X/710/1/346 Astrophys. J. **710**, 346 (2010)
52. **“First Neutrino Point-Source Results From the 22-String IceCube Detector”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:0905.2253 [astro-ph.HE] 10.1088/0004-637X/701/1/L47 Astrophys. J. **701**, L47 (2009)
53. **“Limits on a muon flux from neutralino annihilations in the Sun with the IceCube 22-string detector”** R. Abbasi *et al.* [ICECUBE Collaboration]. arXiv:0902.2460 [astro-ph.CO] 10.1103/PhysRevLett.102.201302 Phys. Rev. Lett. **102**, 201302 (2009)
54. **“Determination of the Atmospheric Neutrino Flux and Searches for New Physics with AMANDA-II”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:0902.0675 [astro-ph.HE] 10.1103/PhysRevD.79.102005 Phys. Rev. D **79**, 102005 (2009)
55. **“Search for high-energy muon neutrinos from the ‘naked-eye’ GRB 080319B with the IceCube neutrino telescope”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:0902.0131 [astro-ph.HE] 10.1088/0004-637X/701/2/1721, 10.1088/0004-637X/708/1/911 Astrophys. J. **701**, 1721 (2009), [Erratum-ibid. **708**, 911 (2010)]
56. **“Estimating the Explosion Time of Core-Collapse Supernovae from Their Optical Light Curves”** D. F. Cowen, A. Franckowiak and M. Kowalski. arXiv:0901.4877 [astro-ph.HE] 10.1016/j.astropartphys.2009.10.007 Astropart. Phys. **33**, 19 (2010)
57. **“The IceCube Data Acquisition System: Signal Capture, Digitization, and Timestamping”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:0810.4930 [physics.ins-det] 10.1016/j.nima.2009.01.001 Nucl. Instrum. Meth. A **601**, 294 (2009)
58. **“Solar Energetic Particle Spectrum on 13 December 2006 Determined by IceTop”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:0810.2034 [astro-ph] 10.1086/595679 Astrophys. J. **689**, L65 (2008)
59. **“Search for Point Sources of High Energy Neutrinos with Final Data from AMANDA-II”** R. Abbasi *et al.* [IceCube Collaboration]. arXiv:0809.1646 [astro-ph] 10.1103/PhysRevD.79.062001 Phys. Rev. D **79**, 062001 (2009)
60. **“Search for Ultra High-Energy Neutrinos with AMANDA-II”** M. Ackermann *et al.* [IceCube Collaboration]. arXiv:0711.3022 [astro-ph] 10.1086/527046 Astrophys. J. **675**, 1014 (2008)
61. **“Results from the ANITA experiment”** A. Silvestri *et al.* [ANITA Collaboration]. 10.1142/S0217732307024279 Mod. Phys. Lett. A **22**, 2237 (2007).
62. **“Detection of Atmospheric Muon Neutrinos with the IceCube 9-String Detector”** A. Achterberg *et al.* [IceCube Collaboration]. arXiv:0705.1781 [astro-ph] 10.1103/PhysRevD.76.027101 Phys. Rev. D **76**, 027101 (2007)

63. **“Multi-year search for a diffuse flux of muon neutrinos with AMANDA-II”** A. Achterberg *et al.* [IceCube Collaboration]. arXiv:0705.1315 [astro-ph] 10.1103/PhysRevD.76.042008, 10.1103/PhysRevD.77.089904 Phys. Rev. D **76**, 042008 (2007), [Erratum-ibid. D **77**, 089904 (2008)]
64. **“The Search for Muon Neutrinos from Northern Hemisphere Gamma-Ray Bursts with AMANDA”** A. Achterberg *et al.* [IceCube and IPN Collaborations]. arXiv:0705.1186 [astro-ph] 10.1086/524920 Astrophys. J. **674**, 357 (2008)
65. **“Search for neutrino-induced cascades from gamma-ray bursts with AMANDA”** A. Achterberg *et al.* [IceCube Collaboration]. astro-ph/0702265 10.1086/518596 Astrophys. J. **664**, 397 (2007)
66. **“Limits on the muon flux from neutralino annihilations at the center of the Earth with AMANDA”** A. Achterberg *et al.* [AMANDA Collaboration]. 10.1016/j.astropartphys.2006.05.007 Astropart. Phys. **26**, 129 (2006).
67. **“Five years of searches for point sources of astrophysical neutrinos with the AMANDA-II neutrino telescope”** A. Achterberg *et al.* [IceCube Collaboration]. astro-ph/0611063 10.1103/PhysRevD.75.102001 Phys. Rev. D **75**, 102001 (2007)
68. **“Measurement of the $\nu(e)$ and total B-8 solar neutrino fluxes with the Sudbury neutrino observatory phase I data set”** B. Aharmim *et al.* [SNO Collaboration]. nucl-ex/0610020 10.1103/PhysRevC.75.045502 Phys. Rev. C **75**, 045502 (2007)
69. **“On the selection of AGN neutrino source candidates for a source stacking analysis with neutrino telescopes”** A. Achterberg *et al.* [IceCube Collaboration]. astro-ph/0609534 10.1016/J.ASTROPARTPHYS.2006.06.012 Astropart. Phys. **26**, 282 (2006)
70. **“Astrophysical tau neutrino detection in kilometer-scale Cherenkov detectors via muonic tau decay”** T. DeYoung, S. Razzaque and D. F. Cowen. astro-ph/0608486 10.1016/j.astropartphys.2006.11.003 Astropart. Phys. **27**, 238 (2007)
71. **“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”** A. Achterberg *et al.* [IceCube Collaboration]. astro-ph/0607233 10.1103/PhysRevLett.97.221101 Phys. Rev. Lett. **97**, 221101 (2006)
72. **“First Year Performance of The IceCube Neutrino Telescope”** A. Achterberg *et al.* [IceCube Collaboration]. astro-ph/0604450 10.1016/j.astropartphys.2006.06.007 Astropart. Phys. **26**, 155 (2006)
73. **“The ICECUBE prototype string in AMANDA”** M. Ackermann *et al.* [AMANDA Collaboration]. astro-ph/0601397 10.1016/j.nima.2005.10.029 Nucl. Instrum. Meth. A **556**, 169 (2006)
74. **“Neutrino astronomy and cosmic rays at the South Pole: Latest results from AMANDA and perspectives for IceCube”** P. Desiati *et al.* [AMANDA and IceCube Collaborations]. 10.1142/S0217751X0503048X Int. J. Mod. Phys. A **20**, 6919 (2005).

75. **“Constraints on cosmic neutrino fluxes from the anita experiment”** S. W. Barwick *et al.* [ANITA Collaboration]. astro-ph/0512265 10.1103/PhysRevLett.96.171101 Phys. Rev. Lett. **96**, 171101 (2006)
76. **“Limits to the muon flux from neutralino annihilations in the sun with the amanda detector”** M. Ackermann *et al.* [AMANDA Collaboration]. astro-ph/0508518 10.1016/j.astropartphys.2005.09.006 Astropart. Phys. **24**, 459 (2006)
77. **“Flux limits on ultra high energy neutrinos with AMANDA-B10”** M. Ackermann, J. Ahrens, H. Albrecht, D. Atlee, X. Bai, R. Bay, M. Bartelt and S. W. Barwick *et al.* 10.1016/j.astropartphys.2004.09.008 Astropart. Phys. **22**, 339 (2005).
78. **“Search for extraterrestrial point sources of high energy neutrinos with AMANDA-II using data collected in 2000-2002”** M. Ackermann *et al.* [AMANDA Collaboration]. astro-ph/0412347 10.1103/PhysRevD.71.077102 Phys. Rev. D **71**, 077102 (2005)
79. **“Measurement of the cosmic ray composition at the knee with the SPASE-2/AMANDA-B10 detectors”** J. Ahrens *et al.* [AMANDA and SPASE Collaborations]. 10.1016/j.astropartphys.2004.04.007 Astropart. Phys. **21**, 565 (2004).
80. **“Results from the AMANDA detector”** P. Olbrechts *et al.* [AMANDA Collaboration]. Acta Phys. Polon. B **35**, 1919 (2004).
81. **“Calibration and survey of AMANDA with the SPASE detectors”** J. Ahrens *et al.* [SPASE and AMANDA Collaborations]. 10.1016/j.nima.2003.12.007 Nucl. Instrum. Meth. A **522**, 347 (2004).
82. **“Status of the IceCube Neutrino Observatory”** J. Ahrens *et al.* [IceCube Collaboration]. 10.1016/j.newar.2003.12.031 New Astron. Rev. **48**, 519 (2004).
83. **“Search for neutrino-induced cascades with AMANDA”** M. Ackermann *et al.* [AMANDA Collaboration]. astro-ph/0405218 10.1016/j.astropartphys.2004.06.003 Astropart. Phys. **22**, 127 (2004)
84. **“Muon track reconstruction and data selection techniques in AMANDA”** J. Ahrens *et al.* [AMANDA Collaboration]. astro-ph/0407044 10.1016/j.nima.2004.01.065 Nucl. Instrum. Meth. A **524**, 169 (2004)
85. **“Results from the AMANDA telescope”** J. Ahrens *et al.* [AMANDA Collaboration]. 10.1016/S0375-9474(03)01120-5 Nucl. Phys. A **721**, 545 (2003).
86. **“Search for extraterrestrial point sources of neutrinos with AMANDA-II”** J. Ahrens *et al.* [AMANDA Collaboration]. astro-ph/0309585 10.1103/PhysRevLett.92.071102 Phys. Rev. Lett. **92**, 071102 (2004)
87. **“Sensitivity of the IceCube detector to astrophysical sources of high energy muon neutrinos”** J. Ahrens *et al.* [IceCube Collaboration]. astro-ph/0305196 10.1016/j.astropartphys.2003.09.003 Astropart. Phys. **20**, 507 (2004)

88. **“Limits on diffuse fluxes of high-energy extraterrestrial neutrinos with the AMANDA-B10 detector”** J. Ahrens, X. Bai, S. W. Barwick, R. C. Bay, T. Becka, K. -H. Becker, E. Bernardini and D. Bertrand *et al.*. astro-ph/0303218 10.1103/PhysRevLett.90.251101 Phys. Rev. Lett. **90**, 251101 (2003)
89. **“Results from AMANDA”** C. Wiebusch *et al.* [AMANDA Collaboration]. 10.1142/S0217732302008575 Mod. Phys. Lett. A **17**, 2019 (2002).
90. **“Search for point sources of high energy neutrinos with AMANDA”** J. Ahrens *et al.* [AMANDA Collaboration]. astro-ph/0208006 10.1086/345352 Astrophys. J. **583**, 1040 (2003)
91. **“Search for neutrino-induced cascades with the AMANDA detector”** J. Ahrens *et al.* [AMANDA Collaboration]. astro-ph/0206487 10.1103/PhysRevD.67.012003 Phys. Rev. D **67**, 012003 (2003)
92. **“Observation of high-energy atmospheric neutrinos with the Antarctic Muon and Neutrino Detector Array”** J. Ahrens *et al.* [AMANDA Collaboration]. astro-ph/0205109 10.1103/PhysRevD.66.012005 Phys. Rev. D **66**, 012005 (2002)
93. **“Measurement of day and night neutrino energy spectra at SNO and constraints on neutrino mixing parameters”** Q. R. Ahmad *et al.* [SNO Collaboration]. nucl-ex/0204009 10.1103/PhysRevLett.89.011302 Phys. Rev. Lett. **89**, 011302 (2002)
94. **“Direct evidence for neutrino flavor transformation from neutral current interactions in the Sudbury Neutrino Observatory”** Q. R. Ahmad *et al.* [SNO Collaboration]. nucl-ex/0204008 10.1103/PhysRevLett.89.011301 Phys. Rev. Lett. **89**, 011301 (2002)
95. **“Limits to the muon flux from WIMP annihilation in the center of the Earth with the AMANDA detector”** J. Ahrens *et al.* [AMANDA Collaboration]. astro-ph/0202370 10.1103/PhysRevD.66.032006 Phys. Rev. D **66**, 032006 (2002)
96. **“Recent results from AMANDA”** E. Andres *et al.* [AMANDA Collaboration]. Int. J. Mod. Phys. A **16S1C**, 1013 (2001).
97. **“Measurement of the rate of $\nu/e + d \rightarrow p + p + e^-$ interactions produced by B-8 solar neutrinos at the Sudbury Neutrino Observatory”** Q. R. Ahmad *et al.* [SNO Collaboration]. nucl-ex/0106015 10.1103/PhysRevLett.87.071301 Phys. Rev. Lett. **87**, 071301 (2001)
98. **“Search for supernova neutrino bursts with the AMANDA detector”** J. Ahrens *et al.* [AMANDA Collaboration]. astro-ph/0105460 10.1016/S0927-6505(01)00154-2 Astropart. Phys. **16**, 345 (2002)
99. **“Observation of high-energy neutrinos using Cherenkov detectors embedded deep in Antarctic ice”** E. Andres, P. Askebjerg, X. Bai, G. Barouch, S. W. Barwick, R. C. Bay, K. H. Becker and L. Bergstrom *et al.*. 10.1038/35068509 Nature **410**, 441 (2001).
100. **“The Sudbury neutrino observatory”** J. Boger *et al.* [SNO Collaboration]. nucl-ex/9910016 10.1016/S0168-9002(99)01469-2 Nucl. Instrum. Meth. A **449**, 172 (2000)

101. **“Digital optical module and system design for a km-scale neutrino detector in ice”** D. M. Lowder, K. H. Becker, D. Cowen, C. Guenther, V. Drozdov, J. Jacobsen, A. Karle and H. Leich *et al.*. 10.1016/S1387-6473(98)00016-5 *New Astron. Rev.* **42**, 301 (1998).
102. **“The AMANDA neutrino telescope: Principle of operation and first results”** E. Andres, P. Askebjerg, S. W. Barwick, R. Bay, L. Bergstrom, A. Biron, J. Booth and A. Bouchta *et al.*. astro-ph/9906203, astro-ph/9906203 10.1016/S0927-6505(99)00092-4 *Astropart. Phys.* **13**, 1 (2000)
103. **“The AMANDA neutrino telescope and the indirect search for dark matter”** F. Halzen *et al.* [AMANDA Collaboration]. hep-ex/9804007 10.1016/S0370-1573(98)00041-6 *Phys. Rept.* **307**, 243 (1998)
104. **“The Sudbury Neutrino Observatory electronics chain”** D. F. Cowen, T. Ekenberg, J. R. Klein, F. M. Newcomer, R. Van Berg, R. G. Van de Water, P. Wittich and A. Biman *et al.*. 10.1109/23.467769 *IEEE Trans. Nucl. Sci.* **42**, 925 (1995).
105. **“Observation of new decay modes of the charmed strange baryon $\Xi(c)^+$ ”** K. W. Edwards *et al.* [CLEO Collaboration]. 10.1016/0370-2693(96)00111-6 *Phys. Lett. B* **373**, 261 (1996).
106. **“Measurements of the inclusive semielectronic D0 branching fraction”** Y. Kubota *et al.* [CLEO Collaboration]. hep-ex/9511014 10.1103/PhysRevD.54.2994 *Phys. Rev. D* **54**, 2994 (1996)
107. **“Measurements of $B \rightarrow \bar{c} D(s)^+ X$ decays”** D. Gibaut *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.53.4734 *Phys. Rev. D* **53**, 4734 (1996).
108. **“Measurements of the decays $\tau^- \rightarrow \bar{c} h^- h^+ h^- \tau$ -neutrino and $\tau^- \rightarrow \bar{c} h^- h^+ h^- \pi^0 \tau$ -neutrino”** R. Balest *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.75.3809 *Phys. Rev. Lett.* **75**, 3809 (1995).
109. **“The Inclusive decay $B \rightarrow \bar{c} X$ ”** Y. Kubota *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.53.6033 *Phys. Rev. D* **53**, 6033 (1996).
110. **“Measurements of the ratios $B(D(s)^+ \rightarrow \bar{c} \text{ eta lepton}^+ \text{ neutrino}) / B(D(s)^+ \rightarrow \bar{c} \text{ phi lepton}^+ \text{ neutrino})$ and $B(D(s)^+ \rightarrow \bar{c} \text{ eta-prime lepton}^+ \text{ neutrino}) / B(D(s)^+ \rightarrow \bar{c} \text{ phi lepton}^+ \text{ neutrino})$ ”** G. Brandenburg *et al.* [CLEO Collaboration]. hep-ex/9508009 10.1103/PhysRevLett.75.3804 *Phys. Rev. Lett.* **75**, 3804 (1995)
111. **“Observation of the isospin violating decay $D(s)^*+ \rightarrow \bar{c} D(s)^+ \pi^0$ ”** J. Gronberg *et al.* [CLEO Collaboration]. hep-ex/9508001 10.1103/PhysRevLett.75.3232 *Phys. Rev. Lett.* **75**, 3232 (1995)
112. **“Observation of the $\Xi(c)^+$ charmed baryon decays to $\Sigma^+ K^- \pi^+$, $\Sigma^+ \text{ anti-}K^*0$, and $\Lambda K^- \pi^+ \pi^+$ ”** T. Bergfeld *et al.* [CLEO Collaboration]. hep-ex/9508006 10.1016/0370-2693(95)01432-2 *Phys. Lett. B* **365**, 431 (1996)
113. **“Observation of a narrow state decaying into $\Xi(c)^+ \pi^-$ ”** P. Avery *et al.* [CLEO Collaboration]. hep-ex/9508010 10.1103/PhysRevLett.75.4364 *Phys. Rev. Lett.* **75**, 4364 (1995)

114. **“Observation of the Cabibbo suppressed charmed baryon decay $\Lambda_c^+ \rightarrow \Sigma^+ p \pi^0$ ”** J. P. Alexander *et al.* [CLEO Collaboration]. hep-ex/9508005 10.1103/PhysRevD.53.1013 Phys. Rev. D **53**, 1013 (1996)
115. **“Search for exclusive charmless hadronic B decays”** D. M. Asner *et al.* [CLEO Collaboration]. hep-ex/9508004 10.1103/PhysRevD.53.1039 Phys. Rev. D **53**, 1039 (1996)
116. **“Measurement of α_s from tau decays”** T. Coan *et al.* [CLEO Collaboration]. 10.1016/0370-2693(95)00824-5 Phys. Lett. B **356**, 580 (1995).
117. **“Search for CP violation in D0 decay”** J. E. Bartelt *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.52.4860 Phys. Rev. D **52**, 4860 (1995).
118. **“A Search for B $\rightarrow \ell \bar{\ell} \nu$ lepton anti-lepton-neutrino”** M. Artuso *et al.* [Cleo Collaboration]. 10.1103/PhysRevLett.75.785 Phys. Rev. Lett. **75**, 785 (1995).
119. **“Measurement of the ratio of branching fractions B (D0 $\rightarrow \ell \pi^- e^+$ electron-neutrino) / B (D0 $\rightarrow \ell K^- e^+$ electron-neutrino)”** F. Butler *et al.* [Cleo Collaboration]. 10.1103/PhysRevD.52.2656 Phys. Rev. D **52**, 2656 (1995).
120. **“Measurement of the decay asymmetry parameters in $\Lambda_c^+ \rightarrow \Sigma^+ \Lambda_c^+ \pi^+$ and $\Lambda_c^+ \rightarrow \Sigma^+ \Lambda_c^+ \pi^0$ ”** M. Bishai *et al.* [CLEO Collaboration]. hep-ex/9502004 10.1016/0370-2693(95)00280-X Phys. Lett. B **350**, 256 (1995)
121. **“Form-factor ratio measurement in $\Lambda_c^+ \rightarrow \Sigma^+ \Lambda_c^+ e^+$ electron-neutrino”** G. D. Crawford *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.75.624 Phys. Rev. Lett. **75**, 624 (1995).
122. **“New decay modes of the Λ_c^+ charm baryon”** R. Ammar *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.74.3534 Phys. Rev. Lett. **74**, 3534 (1995).
123. **“Inclusive decays of B mesons to charmonium”** R. Balest *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.52.2661 Phys. Rev. D **52**, 2661 (1995).
124. **“First measurement of the rate for the inclusive radiative penguin decay $b \rightarrow s \gamma$ ”** M. S. Alam *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.74.2885 Phys. Rev. Lett. **74**, 2885 (1995).
125. **“Observation of excited baryon states decaying to $\Lambda_c^+ \pi^+ \pi^-$ ”** K. W. Edwards *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.74.3331 Phys. Rev. Lett. **74**, 3331 (1995).
126. **“Performance of the ALEPH detector at LEP”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1016/0168-9002(95)00138-7 Nucl. Instrum. Meth. A **360**, 481 (1995).
127. **“Studies of double sided, double metal silicon strip detectors”** J. P. Alexander, C. J. Bebek, T. E. Browder, J. A. Dobbins, S. G. Gray, K. Honscheid, C. D. Jones and N. Katayama *et al.* 10.1016/0168-9002(94)91440-0 Nucl. Instrum. Meth. A **342**, 282 (1994).
128. **“Observation of D1+ (2420) and D2*+ (2460)”** T. Bergfeld *et al.* [CLEO Collaboration]. 10.1016/0370-2693(94)01348-9 Phys. Lett. B **340**, 194 (1994).

129. **“Measurement of the branching fraction for Upsilon (1S) \rightarrow $\tau^+ \tau^-$ ”** D. Cinabro *et al.* [CLEO Collaboration]. hep-ex/9409004 10.1016/0370-2693(94)91309-9 Phys. Lett. B **340**, 129 (1994)
130. **“Observation of B \rightarrow ψ π decays”** J. P. Alexander *et al.* [CLEO Collaboration]. 10.1016/0370-2693(94)01481-Q Phys. Lett. B **341**, 435 (1995), [Erratum-ibid. B **347**, 469 (1995)].
131. **“Measurement of the ratios of form-factors in the decay $D(s)^+ \rightarrow \psi e^+$ electron-neutrino”** P. Avery *et al.* [CLEO Collaboration]. 10.1016/0370-2693(94)90994-6 Phys. Lett. B **337**, 405 (1994).
132. **“First observation of $\Xi(c)^+ \rightarrow \Xi^0 e^+$ electron-neutrino and a measurement of the $\Xi(c)^+ / \Xi(c)^0$ lifetime ratio”** J. P. Alexander *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.74.3113 Phys. Rev. Lett. **74**, 3113 (1995), [Erratum-ibid. **75**, 4155 (1995)].
133. **“Search for neutrinoless decays of the tau lepton”** J. E. Bartelt *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.73.1890 Phys. Rev. Lett. **73**, 1890 (1994).
134. **“Evidence for exclusive B decays to final states containing a charmed baryon”** Y. Kubota *et al.* [CLEO Collaboration]. 10.1080/01422419608223784 Surveys High Energ. Phys. **9**, 315 (1996).
135. **“Upsilon (1s) \rightarrow γ + noninteracting particles”** R. Balest *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.51.2053 Phys. Rev. D **51**, 2053 (1995).
136. **“Measurement of the anti-B \rightarrow D^* lepton anti-neutrino branching fractions and $-V(cb)-$ ”** B. Barish *et al.* [CLEO Collaboration]. hep-ex/9406005 10.1103/PhysRevD.51.1014 Phys. Rev. D **51**, 1014 (1995)
137. **“Semileptonic branching fractions of charged and neutral B mesons”** M. Athanas *et al.* [CLEO Collaboration]. hep-ex/9406004 10.1103/PhysRevLett.73.3503 Phys. Rev. Lett. **73**, 3503 (1994), [Erratum-ibid. **74**, 3090 (1995)]
138. **“Study of the five charged pion decay of the tau lepton”** D. Gibaut *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.73.934 Phys. Rev. Lett. **73**, 934 (1994).
139. **“Production and decay of $D_{10} (2420)$ and $D_{2^*0} (2460)$ ”** P. Avery *et al.* [CLEO Collaboration]. hep-ph/9403359 10.1016/0370-2693(94)90968-7 Phys. Lett. B **331**, 236 (1994), [Erratum-ibid. B **342**, 453 (1995)]
140. **“Measurement of Cabibbo suppressed decays of the tau lepton”** M. Battle *et al.* [CLEO Collaboration]. hep-ph/9403329 10.1103/PhysRevLett.73.1079 Phys. Rev. Lett. **73**, 1079 (1994)
141. **“Two photon production of charged pion and kaon pairs”** J. Dominick *et al.* [CLEO Collaboration]. hep-ph/9403379 10.1103/PhysRevD.50.3027 Phys. Rev. D **50**, 3027 (1994)
142. **“A Measurement of B ($D(s)^+ \rightarrow \psi$ lepton+ neutrino) / b ($D(s)^+ \rightarrow \psi \pi^+$)”** F. Butler *et al.* [CLEO Collaboration]. hep-ph/9403328 10.1016/0370-2693(94)90416-2 Phys. Lett. B **324**, 255 (1994)

143. **“Study of the decay $\Lambda(c)^+ \rightarrow \ell \Lambda \ell^+ \nu$ ”** T. Bergfeld *et al.* [CLEO Collaboration]. hep-ph/9403326 10.1016/0370-2693(94)90295-X Phys. Lett. B **323**, 219 (1994)
144. **“Measurement of the branching fraction for $D^+ \rightarrow \ell K^- \pi^+ \pi^+$ ”** R. Balest *et al.* [CLEO Collaboration]. hep-ph/9403382 10.1103/PhysRevLett.72.2328 Phys. Rev. Lett. **72**, 2328 (1994)
145. **“Luminosity measurement with the CLEO-II detector”** G. D. Crawford *et al.* [CLEO Collaboration]. 10.1016/0168-9002(94)90494-4 Nucl. Instrum. Meth. A **345**, 429 (1994).
146. **“Observation of a new charmed strange meson”** Y. Kubota *et al.* [CLEO Collaboration]. hep-ph/9403325 10.1103/PhysRevLett.72.1972 Phys. Rev. Lett. **72**, 1972 (1994)
147. **“Observation of $D^0 \rightarrow \ell K^+ \pi^-$ ”** D. Cinabro *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.72.1406 Phys. Rev. Lett. **72**, 1406 (1994).
148. **“Observation of inclusive B decays to the charmed baryons $\Sigma(c)^{++}$ and $\Sigma(c)^0$ ”** M. Procaro *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.73.1472 Phys. Rev. Lett. **73**, 1472 (1994).
149. **“Search for B^0 decays to two charged leptons”** R. Ammar *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.49.5701 Phys. Rev. D **49**, 5701 (1994).
150. **“Observation of $\Lambda(c)^+$ decays to $\Lambda \pi^+ \pi^0$, $\Sigma^0 \pi^+$, $\Sigma^0 \pi^+ \pi^0$, and $\Sigma^0 \pi^- \pi^+ \pi^+$ ”** P. Avery *et al.* [CLEO Collaboration]. 10.1016/0370-2693(94)90100-7 Phys. Lett. B **325**, 257 (1994).
151. **“Measurement of two photon production of the $\chi(c^2)$ ”** V. Shelkov *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.50.4265 Phys. Rev. D **50**, 4265 (1994).
152. **“Measurement of cross-section for $\gamma \gamma \rightarrow \ell p \bar{\ell}$ ”** M. Artuso *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.50.5484 Phys. Rev. D **50**, 5484 (1994).
153. **“Measurement of charmless semileptonic decays of B mesons”** J. E. Bartelt *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.71.4111 Phys. Rev. Lett. **71**, 4111 (1993).
154. **“Measurement of the absolute branching fraction for $D^0 \rightarrow \ell K^- \pi^+$ ”** D. S. Akerib *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.71.3070 Phys. Rev. Lett. **71**, 3070 (1993).
155. **“First measurement of $\Gamma(D(s)^+ \rightarrow \ell \mu^+ \nu) / \Gamma(D(s)^+ \rightarrow \ell \phi \pi^+)$ ”** D. Acosta *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.49.5690 Phys. Rev. D **49**, 5690 (1994).
156. **“Observation of B^0 decay to two charmless mesons”** M. Battle *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.71.3922 Phys. Rev. Lett. **71**, 3922 (1993).
157. **“Search for high mass photon pairs in $e^+ e^- \rightarrow \ell \bar{\ell} \gamma \gamma$ ($\ell = e, \mu, \tau, \nu$) at LEP”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(93)91308-A Phys. Lett. B **308**, 425 (1993).

158. **“Analysis of hadronic transitions in upilon (3S) decays”** F. Butler *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.49.40 Phys. Rev. D **49**, 40 (1994).
159. **“Evidence for penguins: First observation of $B \rightarrow \ell K^* (892) \gamma$ ”** R. Ammar *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.71.674 Phys. Rev. Lett. **71**, 674 (1993).
160. **“Study of the decays $\lambda(c)^+ \rightarrow \ell \xi^0 K^+$, $\lambda(c)^+ \rightarrow \ell \sigma^+ K^+$ and $\lambda(c)^+ \rightarrow \ell \xi^- K^+ \pi^+$ ”** P. Avery *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.71.2391 Phys. Rev. Lett. **71**, 2391 (1993).
161. **“Update of electroweak parameters from Z decays”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1007/BF01650432 Z. Phys. C **60**, 71 (1993).
162. **“Search for contact interactions in the reactions $e^+e^- \rightarrow \ell^+\ell^-$ and $e^+e^- \rightarrow \gamma\gamma$ ”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1007/BF01566686 Z. Phys. C **59**, 215 (1993).
163. **“Two measurements of B0 anti-B0 mixing”** J. E. Bartelt *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.71.1680 Phys. Rev. Lett. **71**, 1680 (1993).
164. **“Measurement of the tau polarization at the Z resonance”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1007/BF01498618 Z. Phys. C **59**, 369 (1993).
165. **“Measurement of the anti-B0 and B- meson lifetimes”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(93)90211-Y Phys. Lett. B **307**, 194 (1993), [Erratum-ibid. B **325**, 537 (1994)].
166. **“Measurement of the strong coupling constant using tau decays”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(93)90212-Z Phys. Lett. B **307**, 209 (1993).
167. **“Studies of radiation damage to CAMEX64 preamplifiers exposed to gamma-rays at the Cornell high-energy synchrotron source”** J. P. Alexander, C. Bebek, T. E. Browder, J. A. Dobbins, S. G. Gray, K. Honscheid, C. D. Jones and N. Katayama *et al.* 10.1016/0168-9002(93)91151-C Nucl. Instrum. Meth. A **337**, 171 (1993).
168. **“A Limit on the tau-neutrino mass”** D. Cinabro *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.70.3700 Phys. Rev. Lett. **70**, 3700 (1993).
169. **“Production and decay of the D(s1)+ (2536)”** J. P. Alexander *et al.* [CLEO Collaboration]. 10.1016/0370-2693(93)91448-V Phys. Lett. B **303**, 377 (1993).
170. **“Search for particles with unexpected mass and charge in Z decays”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(93)90066-Q Phys. Lett. B **303**, 198 (1993).
171. **“A Search for exclusive $b \rightarrow \ell u$ semileptonic decays of B mesons”** A. Bean *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.70.2681 Phys. Rev. Lett. **70**, 2681 (1993).
172. **“A Search for tau- $\rightarrow \ell \gamma \mu$: A Test of lepton number conservation”** A. Bean *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.70.138 Phys. Rev. Lett. **70**, 138 (1993).
173. **“Study of D0 decays into anti-K0 and anti-K*0”** M. Procaro *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.48.4007 Phys. Rev. D **48**, 4007 (1993).

174. **“Tau decays with one charged particle plus multiple pi0s”** M. Procaro *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.70.1207 Phys. Rev. Lett. **70**, 1207 (1993).
175. **“Measurement of the tau lepton electronic branching fraction”** D. S. Akerib *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.69.3610 Phys. Rev. Lett. **69**, 3610 (1992), [Erratum-ibid. **71**, 3395 (1993)].
176. **“A Precise measurement of the tau lepton lifetime”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(92)91283-F Phys. Lett. B **297**, 432 (1992).
177. **“Measurement of the $b \rightarrow \tau$ anti-tau-neutrino X branching ratio”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(93)91853-F Phys. Lett. B **298**, 479 (1993).
178. **“Search for CP violation in $Z \rightarrow \tau \tau$ ”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(92)91285-H Phys. Lett. B **297**, 459 (1992).
179. **“Measurement of prompt photon production in hadronic Z decays”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1007/BF01555735 Z. Phys. C **57**, 17 (1993).
180. **“Measurements of mean lifetime and branching fractions of b hadrons decaying to J / psi”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(92)91581-S Phys. Lett. B **295**, 396 (1992).
181. **“A Measurement of the b baryon lifetime”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(92)91284-G Phys. Lett. B **297**, 449 (1992).
182. **“Updated measurement of the average B hadron lifetime”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(92)90108-G Phys. Lett. B **295**, 174 (1992).
183. **“Lepton asymmetry measurements in anti-B $\rightarrow D^* l$ anti-neutrino and implications for V-A and the form-factors”** S. Sanghera *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.47.791 Phys. Rev. D **47**, 791 (1993).
184. **“Measurement of the D^* (2010) branching fractions”** F. Butler *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.69.2041 Phys. Rev. Lett. **69**, 2041 (1992).
185. **“Isospin mass splittings from precision measurements of $D^* - D$ mass differences”** D. Bortoletto *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.69.2046 Phys. Rev. Lett. **69**, 2046 (1992).
186. **“Observation of the semileptonic decays of B(s) and LAMBDA(b) hadrons at LEP”** D. Buskulic *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(92)91654-R Phys. Lett. B **294**, 145 (1992).
187. **“D / s+ decays to eta rho+, eta-prime rho+, and Phi rho+.”** P. Avery *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.68.1279 Phys. Rev. Lett. **68**, 1279 (1992).
188. **“D / s+ decays to eta pi+ and eta-prime pi+.”** J. P. Alexander *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.68.1275 Phys. Rev. Lett. **68**, 1275 (1992).
189. **“Exclusive chi (2P) production in upsilon (3S) decay”** G. D. Crawford *et al.* [CLEO Collaboration]. 10.1016/0370-2693(92)91653-Q Phys. Lett. B **294**, 139 (1992).

190. “**Design and tests for CLEO-II silicon vertex detector**” J. P. Alexander, J. A. Dobbins, K. Honscheid, C. D. Jones, M. Selen, H. M. Worden, F. K. Wuerthwein and J. Gronberg *et al.*. 10.1016/0168-9002(93)90359-P Nucl. Instrum. Meth. A **326**, 243 (1993).
191. “**Properties of hadronic Z decays and test of QCD generators**” D. Buskulic *et al.* [ALEPH Collaboration]. 10.1007/BF01482583 Z. Phys. C **55**, 209 (1992).
192. “**Measurement of the production rates of eta and eta-prime in hadronic Z decays**” D. Buskulic *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(92)90633-F Phys. Lett. B **292**, 210 (1992).
193. “**Measurement of B - anti-B mixing at the Z using a jet charge method**” D. Buskulic *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(92)91943-4 Phys. Lett. B **284**, 177 (1992).
194. “**Search for a very light CP odd neutral Higgs boson of the MSSM**” D. Buskulic *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(92)91469-P Phys. Lett. B **285**, 309 (1992).
195. “**Measurement of alpha-s in hadronic Z decays using all orders resummed predictions**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(92)91942-3 Phys. Lett. B **284**, 163 (1992).
196. “**Evidence for the triple gluon vertex from measurements of the QCD color factors in Z decay into four jets**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(92)91941-2 Phys. Lett. B **284**, 151 (1992).
197. “**Measurement of the tau lepton lifetime**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(92)90413-X Phys. Lett. B **279**, 411 (1992).
198. “**Tracking with the ALEPH time projection chamber**” W. Wiedenmann, W. B. Atwood, T. Barczewski, L. A. T. Bauerdick, L. Bellantoni, E. Blucher, W. Blum and J. Boudreau *et al.*. 10.1109/23.289336 IEEE Trans. Nucl. Sci. **38**, 432 (1991).
199. “**Evidence for b baryons in Z decays**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(92)90736-N Phys. Lett. B **278**, 209 (1992).
200. “**Measurement of tau branching ratios**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1007/BF01566649 Z. Phys. C **54**, 211 (1992).
201. “**The CLEO-II detector**” Y. Kubota *et al.* [CLEO Collaboration]. 10.1016/0168-9002(92)90770-5 Nucl. Instrum. Meth. A **320**, 66 (1992).
202. “**A Study of Bose-Einstein correlations in e+ e- annihilation at 91-GeV**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1007/BF01881709 Z. Phys. C **54**, 75 (1992).
203. “**The Electronic branching ratio of the tau lepton**” R. Ammar *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.45.3976 Phys. Rev. D **45**, 3976 (1992).
204. “**Two-body D(s)+ decays to eta pi+, eta-prime pi+, eta rho+, eta-prime rho+, phi rho+**” M. Daoudi *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.45.3965 Phys. Rev. D **45**, 3965 (1992).

205. **“Measurement of the absolute luminosity with the ALEPH detector”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1007/BF01625896 *Z. Phys. C* **53**, 375 (1992).
206. **“Measurement of the charged particle multiplicity distribution in hadronic Z decays”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(91)90575-B *Phys. Lett. B* **273**, 181 (1991).
207. **“Searches for new particles in Z decays using the ALEPH detector”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-1573(92)90177-2 *Phys. Rept.* **216**, 253 (1992).
208. **“Production and decay of charmed mesons at the Z resonance”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(91)90769-M *Phys. Lett. B* **266**, 218 (1991).
209. **“An Investigation into intermittency”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1007/BF01483869 *Z. Phys. C* **53**, 21 (1992).
210. **“Search for the neutral Higgs bosons of the MSSM and other two doublet models”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(91)90083-3 *Phys. Lett. B* **265**, 475 (1991).
211. **“Improved measurements of electroweak parameters from Z decays into fermion pairs”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1007/BF01483868 *Z. Phys. C* **53**, 1 (1992).
212. **“Measurement of the polarization of tau leptons produced in Z decays”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(91)90079-6 *Phys. Lett. B* **265**, 430 (1991).
213. **“Measurement of isolated photon production in hadronic Z decays”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(91)90380-9 *Phys. Lett. B* **264**, 476 (1991).
214. **“Measurement of the forward - backward asymmetry in Z \rightarrow b anti-b and Z \rightarrow c anti-c”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(91)90607-R *Phys. Lett. B* **263**, 325 (1991).
215. **“Charged particle pair production associated with a lepton pair in Z decays: Indication of an excess in the tau channel”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(91)91716-9 *Phys. Lett. B* **263**, 112 (1991).
216. **“Search for a new weakly interacting particle”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(91)90657-C *Phys. Lett. B* **262**, 139 (1991).
217. **“Performance of the ALEPH time projection chamber”** W. B. Atwood, T. Barczewski, L. A. T. Bauerdick, L. Bellantoni, E. Blucher, W. Blum, J. Boudreau and O. Boyle *et al.*. 10.1016/0168-9002(91)90038-R *Nucl. Instrum. Meth. A* **306**, 446 (1991).
218. **“Measurement of charge asymmetry in hadronic Z decays”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(91)90844-G *Phys. Lett. B* **259**, 377 (1991).
219. **“The Readout processors of the ALEPH time projection chamber and their performance”** E. Blucher, J. Fagerstrom, S. Haywood, U. Larsson, I. Lehraus, B. Loeffstedt, T. Lohse and J. May *et al.*. 10.1109/23.57368 *IEEE Trans. Nucl. Sci.* **37**, 1210 (1990).

220. “**Measurement of alpha-s from the structure of particle clusters produced in hadronic Z decays**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(91)91926-M Phys. Lett. B **257**, 479 (1991).
221. “**Measurement of the B hadron lifetime**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(91)91927-N Phys. Lett. B **257**, 492 (1991).
222. “**Measurement of B - anti-B mixing at the Z**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(91)91239-R Phys. Lett. B **258**, 236 (1991).
223. “**Measurement of the strong coupling constant alpha-s from global event shape variables of hadronic Z decays**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(91)90278-X Phys. Lett. B **255**, 623 (1991).
224. “**Search for excited neutrinos in Z decay**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(90)91174-A Phys. Lett. B **250**, 172 (1990).
225. “**Measurement of electroweak parameters from Z decays into Fermion pairs**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1007/BF01572019 Z. Phys. C **48**, 365 (1990).
226. “**Searches for the standard Higgs boson**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(90)91349-G Phys. Lett. B **246**, 306 (1990).
227. “**Search for a very light Higgs boson in Z decays**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(90)90148-Y Phys. Lett. B **245**, 289 (1990).
228. “**Search for Neutralino Production in Z Decays**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(90)90361-9 Phys. Lett. B **244**, 541 (1990).
229. “**Heavy Flavor Production in Z Decays**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(90)90362-A Phys. Lett. B **244**, 551 (1990).
230. “**Search for Decays of the Z^0 Into a Photon and a Pseudoscalar Meson**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(90)91883-D Phys. Lett. B **241**, 635 (1990).
231. “**A Search for Pair Produced Charged Higgs Bosons in Z^0 Decays**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(90)91882-C Phys. Lett. B **241**, 623 (1990).
232. “**ALEPH: A detector for electron-positron annihilations at LEP**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0168-9002(90)91831-U Nucl. Instrum. Meth. A **294**, 121 (1990), [Erratum-*ibid.* A **303**, 393 (1991)].
233. “**Search for the Neutral Higgs Boson From Z^0 Decay in the Higgs Mass Range Between 11-GeV and 24-GeV**” D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(90)91501-2 Phys. Lett. B **241**, 141 (1990).
234. “**The FASTBUS readout system for the ALEPH time projection chamber**” J. Richstein, S. R. Amendolia, T. Barczewski, L. A. T. Bauerdick, E. Blucher, J. Boudreau, W. Blum and D. Cinabro *et al.*. 10.1109/23.41076 IEEE Trans. Nucl. Sci. **36**, 1514 (1989).

235. **“Management and control of the readout processors (TPPs) of the ALEPH time projection chamber”** P. S. Marrocchesi, S. R. Amendolia, T. Barczewski, L. A. T. Bauerdick, E. Blucher, W. Blum, J. Boudreau and D. Cinabro *et al.*. 10.1109/23.41083 IEEE Trans. Nucl. Sci. **36**, 1459 (1989).
236. **“Gas System for Aleph TPC”** T. Barczewski, L. A. T. Bauerdick, L. Bellantoni, E. Blucher, W. Blum, J. Boudreau, D. Cinabro and J. Conway *et al.*. 10.1016/0168-9002(90)90257-7 Nucl. Instrum. Meth. A **289**, 176 (1990).
237. **“The Spatial Resolution of the Aleph TPC”** P. S. Marrocchesi, S. R. Amendolia, T. Barczewski, L. A. T. Bauerdick, E. Blucher, W. Blum, J. Boudreau and D. Cinabro *et al.*. 10.1016/0168-9002(89)91418-6 Nucl. Instrum. Meth. A **283**, 573 (1989).
238. **“A Precise Determination of the Number of Families With Light Neutrinos and of the Z Boson Partial Widths”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(90)91984-J Phys. Lett. B **235**, 399 (1990).
239. **“Search for Neutral Higgs Bosons From Supersymmetry in Z Decays”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(90)91447-J Phys. Lett. B **237**, 291 (1990).
240. **“Search for Excited Leptons in Z^0 Decay”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(90)90391-I Phys. Lett. B **236**, 501 (1990).
241. **“A Search for New Quarks and Leptons From Z^0 Decay”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(90)90392-J Phys. Lett. B **236**, 511 (1990).
242. **“Search for Supersymmetric Particles Using Acoplanar Charged Particle Pairs From Z^0 Decays”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(90)90600-B Phys. Lett. B **236**, 86 (1990).
243. **“Search for the Neutral Higgs Boson from Z^0 Decay”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(90)90834-S Phys. Lett. B **236**, 233 (1990).
244. **“Properties of Hadronic Events in e^+e^- Annihilation at $S^{(1/2)} = 91\text{-GeV}$ ”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(90)92030-M Phys. Lett. B **234**, 209 (1990).
245. **“Determination of the Number of Light Neutrino Species”** D. Decamp *et al.* [ALEPH Collaboration]. 10.1016/0370-2693(89)90704-1 Phys. Lett. B **231**, 519 (1989).
246. **“Gating in the Aleph Time Projection Chamber”** D. F. Cowen, S. R. Amendolia, M. Binder, W. Blum, M. Bykhovsky, A. Caldwell, M. G. Cherney and D. Demille *et al.*. 10.1016/0168-9002(86)91213-1 Nucl. Instrum. Meth. A **252**, 403 (1986).
247. **“Studies Of Wire Gain And Track Distortion Near The Sector Edges Of The Aleph Time Projection Chamber”** D. Muller, S. R. Amendolia, M. Binder, W. Blum, M. Bykhovsky, A. Caldwell, D. F. Cowen and D. Demille *et al.*. Nucl. Instrum. Meth. A **252**, 399 (1986).
248. **“Tpc90, a Test Model for the Aleph Time Projection Chamber”** W. Witzeling, S. R. Amendolia, R. Benetta, M. Binder, W. Blum, A. Caldwell, M. G. Cherney and D. F. Cowen *et al.*. 10.1016/0168-9002(86)91211-8 Nucl. Instrum. Meth. A **252**, 392 (1986).

249. **“Ion Trapping Properties Of A Synchronously Gated Time Projection Chamber”** S. R. Amendolia, R. Benetta, M. Binder, W. Blum, A. Caldwell, M. G. Cherney, D. F. Cowen and F. Fidecaro *et al.*. 10.1016/0168-9002(85)90714-4 Nucl. Instrum. Meth. A **239**, 192 (1985).
250. **“Study of flavor tagged baryon production in B decay”** R. Ammar *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.55.13 Phys. Rev. D **55**, 13 (1997).
251. **“A Measurement of the branching fraction $B(\tau^+ \rightarrow \bar{c} h^+ \pi^0 \tau\text{-neutrino})$ ”** M. Artuso *et al.* [CLEO Collaboration]. hep-ph/9404310 10.1103/PhysRevLett.72.3762 Phys. Rev. Lett. **72**, 3762 (1994)
252. **“Exclusive hadronic B decays to charm and charmonium final states”** M. S. Alam *et al.* [CLEO Collaboration]. hep-ph/9403295 10.1103/PhysRevD.50.43 Phys. Rev. D **50**, 43 (1994)
253. **“Precision measurement of the $D(s)^+ - D(s)^+$ mass difference”** D. N. Brown *et al.* [CLEO Collaboration]. hep-ph/9403327 10.1103/PhysRevD.50.1884 Phys. Rev. D **50**, 1884 (1994)
254. **“Search for exclusive $b \rightarrow \bar{c} u$ transitions in hadronic decays of B mesons involving $D(s)^+$ and $D(s)^+ \pi^+$ mesons”** J. P. Alexander *et al.* [CLEO Collaboration]. 10.1016/0370-2693(93)90827-5 Phys. Lett. B **319**, 365 (1993).
255. **“Measurement of exclusive semileptonic decays of D mesons”** A. Bean *et al.* [CLEO Collaboration]. 10.1016/0370-2693(93)91385-Z Phys. Lett. B **317**, 647 (1993).
256. **“Measurement of the decay $\tau^- \rightarrow \bar{c} \pi^- \pi^+ \pi^- 2 \pi^0 \tau\text{-neutrino}$ ”** D. Bortoletto *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.71.1791 Phys. Rev. Lett. **71**, 1791 (1993).
257. **“Measurement of exclusive $\Lambda_b(c)$ decays with a Σ^+ in the final state”** Y. Kubota *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.71.3255 Phys. Rev. Lett. **71**, 3255 (1993).
258. **“Observation of the charmed Baryon $\Sigma(c)^+$ and measurement of the isospin mass splittings of the $\Sigma(c)$ ”** G. D. Crawford *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.71.3259 Phys. Rev. Lett. **71**, 3259 (1993).
259. **“Measurement of the ratio $B(D^+ \rightarrow \bar{c} \pi^0 \text{lepton}^+ \text{neutrino}) / B(D^+ \rightarrow \bar{c} \text{anti-K}^0 \text{lepton}^+ \text{neutrino})$ ”** M. S. Alam *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.71.1311 Phys. Rev. Lett. **71**, 1311 (1993).
260. **“The $D \rightarrow \bar{c} \pi \pi$ branching fractions”** M. Selen *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.71.1973 Phys. Rev. Lett. **71**, 1973 (1993).
261. **“A Measurement of the tau lepton mass”** R. Ballest *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.47.R3671 Phys. Rev. D **47**, 3671 (1993).
262. **“A Measurement of the tau lepton lifetime”** M. Battle *et al.* [CLEO Collaboration]. 10.1016/0370-2693(92)91409-3 Phys. Lett. B **291**, 488 (1992).

263. **“Measurement of tau decays involving eta mesons”** M. Artuso *et al.* [CLEO Collaboration]. 10.1103/PhysRevLett.69.3278 Phys. Rev. Lett. **69**, 3278 (1992).
264. **“Shape studies of quark jets versus gluon jets at $s^{*}(1.2) = 10\text{-GeV}$ ”** M. S. Alam *et al.* [CLEO Collaboration]. 10.1103/PhysRevD.46.4822 Phys. Rev. D **46**, 4822 (1992).
265. **“Observation of the decay $\chi(c)0 \rightarrow \omega\text{-}K^+$ ”** S. Henderson *et al.* [CLEO Collaboration]. 10.1016/0370-2693(92)91448-I Phys. Lett. B **283**, 161 (1992).
266. **“Inclusive $\chi(2\text{ p})$ production in upilon ($3s$) decay”** R. Morrison *et al.* [CLEO-II Collaboration]. 10.1103/PhysRevLett.67.1696 Phys. Rev. Lett. **67**, 1696 (1991).
267. **“Measurement of the inclusive B^* cross-section above the Upsilon ($4S$)”** D. S. Akkerib *et al.* [CLEO-II Collaboration]. 10.1103/PhysRevLett.67.1692 Phys. Rev. Lett. **67**, 1692 (1991).