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Education

- 2008 PhD in Physics, University of Washington, Seattle, Washington
- 2003 MSc in Physics, University of Washington, Seattle, Washington
- 2000 BS in Physics, *Magna cum laude*, Arizona State Univeristy, Tempe, Arizona

Publications & Presentations

JOURNAL ARTICLES

- 2012 “A search for low-mass WIMPs with EDELWEISS-II heat-and-ionization detectors”, E. Armengaud, et al., [arxiv:1207.1815](https://arxiv.org/abs/1207.1815)
- “A multi-tiered data structure and process management system based on ROOT and CouchDB“, G. A. Cox, et al., Nucl. Instrum. Meth. A, 684, 63-72
- 2011 “Combined Limits on WIMPs from the CDMS and EDELWEISS Experiments“, Z. Ahmed, et al, Phys. Rev. D, 011102
- “Final results of the EDELWEISS-II WIMP search using a 4-kg array of cryogenic germanium detectors with interleaved electrodes“, E. Armengaud et al., Phys. Lett. B 702, 329-335
- 2008 “An Independent Measurement of the Total Active 8B Solar Neutrino Flux Using an Array of 3He Proportional Counters at the Sudbury Neutrino Observatory“, B. Aharmin, et al, Phys. Rev Lett. 101 111301
- 2007 “An array of low-background 3He proportional counters for the Sudbury Neutrino Observatory“, J. F. Amsbaugh, et al, Nucl. Instrum. Meth. A 579, 1054
- 2006 “Sudbury Neutrino Observatory Neutral Current Detectors Signal Readout System“, John F. Amsbaugh et al. Nucl. Instrum. Meth. A, 579, 1054-1080

- “A Search for Neutrinos from the Solar ${}^7\text{Be}$ Reaction and the Diffuse Supernova Neutrino Background with the Sudbury Neutrino Observatory”, SNO Collaboration. *ApJ* 653, 1545
- 2005 “A Search for Periodicities in the 8B Solar Neutrino Flux Measured by the Sudbury Neutrino Observatory”, SNO Collaboration. *Phys. Rev. D.* 72 052010
- “Electron Energy Spectra, Fluxes, and Day-Night Asymmetries of 8B Solar Neutrinos from the 391-Day Salt Phase SNO Data Set”, SNO Collaboration. *Phys. Rev. C.* 72 055502
- 2004 “Sudbury Neutrino Observatory Neutral Current Detectors Signal Readout System”, G. A. Cox, et al, *IEEE Trans. Nucl. Sci.* 51, 2227
- “Sudbury Neutrino Observatory Neutrino Current Detector Acquisition Software Overview”, M. A. Howe, et al, *IEEE Trans. Nucl. Sci.* 51, 878
- “Electron Antineutrino Search at the Sudbury Neutrino Observatory”, SNO Collaboration. *Phys. Rev. D.* 70 093014
- “Constraints on Nucleon Decay via Invisible Modes from the Sudbury Neutrino Observatory”, SNO Collaboration. *Phys. Rev. Lett.* 92, 102004
- “Measurement of the Total Active 8B Solar Neutrino Flux at the Sudbury Neutrino Observatory with Enhanced Neutral Current Sensitivity”, SNO Collaboration. *Phys. Rev. Lett.* 92 181301
- 2002 “Measurement of Day and Night Neutrino Energy Spectra at SNO and Constrains on Neutrino Mixing Parameters”, SNO Collaboration. *Phys. Rev. Lett.* 89 011302
- “Direct Evidence for Neutrino Flavor Transformation from Neutral-Current Interactions in the Sudbury Neutrino Observatory”, SNO Collaboration. *Phys. Rev. Lett.* 89 011301
- 2001 “Measurement of $\nu_e + d \rightarrow p + p + e^-$ Interactions Produced by 8B Solar Neutrinos at the Sudbury Neutrino Observatory”, SNO Collaboration. *Phys. Rev. Lett.* 87 071301

RESENT PRESENTATIONS

- 2012 “The EDELWEISS DM search. Phase II to Phase III”, UCLA Dark Matter Conference, <https://hepconf.physics.ucla.edu/dm12/talks/cox.pdf>
- 2011 “Latest Results from Edelweiss II”, CENPA Seminar, Univeristy of Washington *Invited Seminar*
- “Latest Results from the Edelweiss Dark Matter Search”, APS Spring Meeting, Anaheim, California
- “Latest Results from Edelweiss II”, DPG Spring Meeting, Muenster, Germany
- 2008 “SNO’s Final Solar Neutrino Flux Measurement: The NCD Phase”, Institut für Kernphysik Seminar
- 2005 “Event Identification in SNO’s NCD Phase”, APS/Japanese Physics Society - HAW05

Professional Experience

- 2010-present *Postdoctoral Research Fellow*, Karlsruher Institut für Technologie
- Member of the EDELWEISS collaboration
 - Member of the EURECA collaboration (conceptual design development)
 - Member of the AARM collaboration (2012-present)
 - Teaching Responsibilities: Intro to Radiation Detection, Intro to Nuclear and Particle Physics
 - Principle Investigator: Karlsruhe School of Elementary Particle and Astroparticle Physics (KSETA)
- 2009 *Visiting Scholar*, CENPA, University of Washington
- KATRIN focal-plane detector characterization and commissioning (analysis software)
- 2008-2009 *Assistant Professor*, Digipen Institute of Technology
- Introductory theory and lab courses
 - Calculus-based Advanced Mechanics
- 2008 *Postdoctoral Research Fellow*, Karlsruher Institut für Technologie
- Member of the KATRIN collaboration
- 2000-2008 *Graduate Research Assistant*, CENPA, University of Washington
Advisor: John F. Wilkerson
- Thesis: "Data Integrity and Electronic Calibrations for the Neutral Current Detector Phase Measurement of the 8B Solar Neutrino Flux at the Sudbury Neutrino Observatory"
- 1999-2000 *Lab Assistant*, Ion Beam Analysis of Materials Lab, Arizona St. University
Advisor: Robert Culbertson
- 1998-1999 *Teaching Assistant*, Arizona St. University
- 1998 *Summer Research Assistant*, NSF Research Experience for Undergraduates Program, Purdue University
Advisor: Albert Chang

Committees and Affiliations

Current APS Member

- Units: Division of Nuclear Physics, Division of Particles and Fields, Forum for Graduate Student Affairs, Northwest Section

2012 *Organizer for Helmholtz Alliance for Astroparticle Physics Dark Matter Workshop*

2003 *APS Forum for Graduate Student Affairs Nominating Committee*

Society of Physics Students, Arizona State University

Sigma Pi Sigma Honor Society, Arizona State University Chapter

Technical Skills

- Fluent in C/C++ (analysis, DAQ software), Python, ROOT, CouchDB, Digital Signal Processing
- General experience with Fortran, PENELOPE, Matlab, LabVIEW, Perl, Geant4, Grid computing (Sun Grid, XGrid), Javascript, HTML