

Richard W. Schnee
Biographical Sketch

(a) Professional Preparation:

Princeton University, Physics, B.A., June 1989

University of California, Santa Cruz, Physics, M.S., March 1991

University of California, Santa Cruz, Physics, Ph.D., June 1996

Case Western Reserve University, Research Associate in Particle Astrophysics, 1996–1999

Case Western Reserve University, Senior Research Associate in Particle Astrophysics, 1999–2003

(b) Appointments:

Assistant Professor of Physics, Syracuse University: August 2007 – present

Visiting Assistant Professor of Physics, Case Western Reserve University: June 2003 – May 2007

(c) 5 Most Closely Related Publications, and 5 Other Significant Publications

- Z. Ahmed *et al.* (CDMS-II Collaboration), “Results from a Low-Energy Analysis of the CDMS II Germanium Data,” *Phys. Rev. Lett.* **106**, 131302 (2011) [arXiv:1011.2482 [astro-ph.CO]].
- Z. Ahmed *et al.* (CDMS-II Collaboration), “Dark Matter Search Results From The CDMS-II Experiment,” *Science* **327**, 1619 (2010) [arXiv:0912.3592 [astro-ph.CO]].
- Z. Ahmed, *et al.* (CDMS Collaboration of 57 co-authors), “Search for Weakly Interacting Massive Particles with the First Five-Tower Data from the Cryogenic Dark Matter Search at the Soudan Underground Laboratory,” *Phys. Rev. Lett.* **102**, 011301 (2009). <http://arxiv.org/abs/0802.3530>
- D.S. Akerib, *et al.* (CDMS Collaboration of 55 co-authors), “Limits on spin-independent WIMP-nucleon interactions from the two-tower run of the Cryogenic Dark Matter Search,” *Phys. Rev. Lett.* **96**, 011302 (2006). <http://arxiv.org/abs/astro-ph/0509259>
- R.W. Schnee, Z. Ahmed, S.R. Golwala, D.R. Grant, and K. Poinar, “Screening Surface Contamination with BetaCage,” *Topical Workshop on Low Radioactivity Techniques: LRT 2006, AIP Conference Proceedings Vol. 897*, 20–25.
- D.S. Akerib, *et al.* (CDMS Collaboration of 51 co-authors), “Exclusion limits on the WIMP-nucleon cross section from the first run of the Cryogenic Dark Matter Search in the Soudan Underground Laboratory,” *Phys. Rev.* **D72**, 052009 (2005). <http://arxiv.org/abs/astro-ph/0507190>
- D.S. Akerib, M. Dragowsky, D. Driscoll, S. Kamat, T. Perera, R. Schnee, G. Wang, R. Gaitskell, L. Bogdanova, V. Trofimov, “Demonstration of feasibility of operating a silicon ZIP detector with 20 eV threshold,” *Nucl. Instrum. Meth.* **A520**, 163 (2004).
- D.S. Akerib, *et al.* (CDMS Collaboration of 51 co-authors), “First results from the Cryogenic Dark Matter Search in the Soudan Underground Lab,” *Phys. Rev. Lett.* **93**, 211301 (2004).
- V. Mandic, B. Sadoulet, and R.W. Schnee, 2005. “Maximum-likelihood approach for signal estimation in direct detection experiments for Dark Matter,” *Nucl. Instr. Meth. A* **553**: 459–469. *Nucl. Instrum. Meth.* **A553**, 459 (2005).
- R. Abusaidi, *et al.* (CDMS Collaboration of 54 co-authors), “Exclusion Limits on the WIMP-Nucleon Cross-Section from the Cryogenic Dark Matter Search,” *Phys. Rev. Lett.* **84**, 5699 (2000).

N.B.: In this candidate’s discipline, in which experiments are performed by large collaborations across several institutions, the order of authorship on science papers is generally alphabetic by surname.

(d) Synergistic Activities

- Gave four lectures on “Dark Matter Experiment” at Theoretical Advanced Study Institute in Elementary Particle Physics (TASI), University of Colorado, Boulder, Colorado, June 1–26, 2009.
- Led ILIAS Training Session, “From Data to WIMP Limits,” a four-day workshop for 30 graduate students, post-docs, and faculty working on European direct dark matter detection experiments, in Aussois, France, 11–14 January 2008.
- Member of organizing committee of workshop on Synergies in Low-Background Ultra-Sensitive Radiation Techniques, A Workshop to Develop Applications and Collaborations across Disciplines, Minneapolis, Minnesota, 25–26 July 2005.
- Member of working groups on Dark Matter and Counting Facilities for the science and engineering communities’ interdisciplinary response to the first solicitation from the NSF for site-independent proposals for the Deep Underground Science and Engineering Laboratory (DUSEL) Program planning and technical requirements.
- Helped lead development of interactive astrophysics exhibits for Great Lakes Science Center, 2000–2003, and for Milton J. Rubinstein Museum of Science and Technology, 2009–present.

(e) Collaborators & Other Affiliations

Collaborators: Z. Ahmed, Caltech; D.S. Akerib, CWRU; S. Arrenberg, U. Zurich; M.J. Attisha, Brown U.; C. Bailey, CWRU; D. Balakishiyeva, U. Florida; L. Baudis, U. Zurich; D.A. Bauer, FNAL; J. Beaty, U. Minn.; M. Boulay, Queen’s U.; P.L. Brink, Stanford; T. Bruch, U. Zurich; R. Bunker, UCSB; B. Cai, Queen’s U.; B. Cabrera, Stanford; D.O. Caldwell, UCSB; M. Chen, Queen’s U.; K. Coakley, NIST-Boulder; J. Cooley, Stanford; M.B. Crisler, FNAL; P. Cushman, U. Minn.; M. Daal, UC Berkeley; F. DeJongh, FNAL; J. Doyle, Harvard; M.R. Dragowsky, CWRU; F. Duncan, SNOLAB; L. Duong, U. Minn.; J. Emes, LLNL; E. Figueroa-Feliciano, MIT; J. Fillipini, Caltech; J. Formaggio, MIT; M. Fritts, U. Minn.; R.J. Gaitskell, Brown U.; D. Gastler, BU; M. Gold, LANL; S.R. Golwala, Caltech; K. Graham, Carleton; D.R. Grant, U. Alberta; V. Guiseppe, USD; R. Hakobyan, U. Alberta; J. Hall, FNAL; A. Hallin, U. Alberta; R. Henning, UNC; R. Hennings-Yeomans, LANL; S. Hertel, MIT; A. Hime, LANL; D. Holmgren, FNAL; L. Hsu, FNAL; M.E. Huber, UCDHSC; C. Jillings, SNOLAB; O. Kamaev, U. Minn.; E. Kearns, BU; J. Klein, U. Penn; M. Kiveni, Syracuse; M. Kos, Syracuse; M. Kuzniak, Queen’s U.; S. Leclercq, U. Florida; S.W. Leman, MIT; H. Lippincott, Yale; D. Loomba, UNM; R. Mahapatra, TAMU; V. Mandic, U. Minn.; K. McCarthy, MIT; A. McDonald, Queen’s U.; R. McDonald, LBNL; D. McKinsey, Yale; D. Mei, USD; P. Meunier, UC Berkeley; N. Mirabolfathi, UC Berkeley; J. Monroe, MIT; D. Moore, Caltech; H. Nelson, UCSB; J. Nikkel, Yale; L. Novak, Stanford; R.W. Ogburn, Caltech; G. Orebi Gann, U. Penn; K. Poinar, U. Wash.; M. Pyle, Stanford; X. Qiu, U. Minn.; E. Ramberg, FNAL; W. Rau, Queen’s U.; A. Reisetter, U. Minn.; K. Rielage, LANL; M. Rohnquest, TUNL; T. Saab, U. Florida; B. Sadoulet, LBNL; J. Sander, UCSB; R. Schmitt, FNAL; S. Seibert, U. Penn.; D.N. Seitz, UC Berkeley; B. Serfass, UC Berkeley; K. Sundqvist, UC Berkeley; M. Tarka, U. Zurich; J-P.F. Thompson, Brown U.; A. Tomada, Stanford; G. Wang, ANL; S. Yellin, UCSB; J. Yoo, FNAL; B.A. Young, Santa Clara U.

Graduate and Postdoctoral Advisors: D. Coyne (deceased), graduate; D.S. Akerib (CWRU), postdoctoral.

Thesis Advisees and Postgraduate-Scholar Sponsors: M. Kiveni, B. Wang, Y. Chen, Syracuse U.; M. Kos, PNNL (3 Graduate Advisees; 1 Post-doctoral sponsoree).