Scott L. Nutter

Refereed Publications


**Books**


**Conference Proceedings**


S.W. Nam et al., (CREAM Collaboration) “Performance of a Dual Layer Silicon Charge Detector during CREAM Balloon Flights.” *IEEE TRANSACTIONS ON NUCLEAR SCIENCE*, 54, 1743, 2007


“Best Case Practices of Technology at Eastern New Mexico University.” Calvin DeWitt, Scott Nutter, Mary Ayala, and Debra Hall. Proceedings of the Mid-South Instructional Technology Conference, Middle Tennessee State University, Murfreesboro, Tennessee, April 6-8, 1997.


**Other Publications**

1. “Balloons over Antarctica.” Department of Physics & Geology Departmental Newsletter, Fall 2006.
2. “A Trip to Antarctica.” NKU Arts & Sciences Vista Newsletter, Fall 2006.
Presentations


“NKU CREST Simulations Status” CREST Simulations Review meeting, Indiana University, February 2009.

“CREST Simulations: New & Old” CREST collaboration meeting, University of Michigan, June 2009.

“CREST Spring 2009 flight crystal to crystal timing observations” CREST collaboration meeting, University of Chicago, September 2009.

“Comments on CREST crystal background rates” CREST collaboration meeting, University of Chicago, September 2009.

“CREST Simulations: Tidying up” CREST collaboration meeting, University of Chicago, September 2009.

“CREST Recovery document” CREST collaboration meeting, Indiana University, December 2009.

“Sabbatical summary” given to Northern Kentucky University Board of Regents, 14 January, 2009.


“Veto status” presented at CREST collaboration meeting at Northern Kentucky University, December 6-7, 2008.

“CREST synchrotron generator status” presented at CREST collaboration meeting at Northern Kentucky University, December 6-7, 2008.

“Bremsstrahlung and CREST: A “Head’s Up”” presented at CREST collaboration meeting at Northern Kentucky University, December 6-7, 2008.

“Analysis Possibility: extracting Compton scatters through the timing distribution” presented at CREST collaboration meeting at Northern Kentucky University, December 6-7, 2008.

“Cosmic Rays: An introductory class in one evening.” Friends of the Observatory invited speaker (Cincinnati Observatory), Cincinnati, OH, October 15, 2008.


“CREST: The Cosmic Ray Electron Synchrotron Telescope” colloquium presented at the University of Maryland Department of Physics, April 28, 2008.

“CREST: The Cosmic Ray Electron Synchrotron Telescope” colloquium presented at the University of Cincinnati Department of Physics, April 17, 2008.

“CREST: The Cosmic Ray Electron Synchrotron Telescope” colloquium presented at Northern Kentucky University Department of Physics & Geology, April 15, 2008.
“Antarctic recovery considerations in instrument design” presented at CREST collaboration meeting at Indiana University, March 12, 2008.


“Synchrotron radiation from primary cosmic ray electrons: Monte Carlo studies of event topologies and potential backgrounds at balloon altitudes” Poster session at the International Cosmic Ray Conference, Merida (June 2007).

“CREAM-1 GEANT4 MC” presented at the CREAM collaboration meeting at the University of Maryland, June 14, 2007.

“CREST veto overview” presented at CREST collaboration meeting at Indiana University, March 30, 2007.

“Particle Astrophysics@NKU” presented at Northern Kentucky University Department of Physics & Geology seminar, March 28, 2007.

“CREST Event Generator and Instrument Monte Carlo” CREST collaboration meeting, University of Michigan, December 2, 2006.

“CREST Veto Fiber Readout Prototype Characterization” CREST collaboration phone conference call, October 2006.

“Astrophysics in Antarctica: Cosmic rays and the art of scientific ballooning on the Ice.” Friends of the Observatory invited speaker (Cincinnati Observatory), Cincinnati, OH, October 5, 2006.

“CREST Detector GEANT4 Monte Carlo” CREST collaboration meeting, Northern Kentucky University, August 19, 2006.

“Atmospheric showers GEANT4 Simulation” CREST collaboration meeting, Northern Kentucky University, August 19, 2006.

“Searching for high energy cosmic ray electrons using the Earth’s magnetic field” April APS meeting, Dallas, TX April 24, 2006.

“A Traveling Physics Demonstration Show for Northern Kentucky” April APS meeting, Dallas, TX April 22, 2006.

“High Adventure in Antarctica” Faculty Brown Bag, Northern Kentucky University, March 15, 2006.

“Astrophysics in Antarctica: Cosmic rays and the art of scientific ballooning on the Ice” Northern Kentucky University Sigma Xi meeting, February, 2006.

“Photonic component of atmospheric showers a la GEANT4” CREST collaboration meeting, Chicago IL, Jan 14, 2006.

“Searching for high energy cosmic ray electrons using the Earth’s magnetic field.” Kentucky Academy of Science Annual Meeting, November 2005.


“GEANT4 simulation of atmospheric X-ray background at balloon altitudes.” Presented at the CREST collaboration meeting, University of Chicago, June 24, 2004.


“The antimatter abundance ratios in the cosmic rays from 5 to 50 GeV.” Presented at the Ohio Section of the American Physical Society meeting, Athens, Ohio, April 2004.


“From There to Here.” Talk given at the University of Minnesota to Research Experience for Undergraduates (REU) students about a career as a professor at a four year school, July, 2003.

“Balloons, cosmic rays, antiprotons, and Antarctica.” Talk at Northern Kentucky University Sigma Xi meeting, March 6, 2002.

“The HEAT Cosmic Ray Antiproton Detector.” Talk at Miami University Department of Physics, February 2002.


“HEAT PBAR Analysis” at the HEAT--pbar collaboration at The University of Michigan, Ann Arbor, Michigan, May 21-22, 2001.

“The HEAT Cosmic Ray Antiproton Detector.” Talk at Wittenberg University Department of Physics, February 2001.

“CREAM TCD Progress Report” at the CREAM collaboration meeting at the University of Maryland, February 2-3, 2001.


“PSU HEAT Analysis Results” at the HEAT-pbar collaboration at Indiana University, Bloomington, Indiana, September 16, 2000.

“Current status of the CREAM charge detector” given at the CREAM collaboration meeting at the University of Maryland, July 10, 2000.

“A cross-discipline study of the pedagogical impact of item analysis technology.” Presented at the New Mexico Higher Education Assessment Conference, February 24-26, 2000, Las Cruces NM.


“K-12 Education Materials and Opportunities at NASA.” Workshop presented at Eastern New Mexico University through Extended Learning, April, 1999.


“Current status of the HEAT Time of Flight detector” given at the HEAT collaboration meeting in Ann Arbor, Michigan, Nov. 8-9, 1996.


“Current status of the HEAT Time of Flight detector” given at the HEAT collaboration meeting in Ann Arbor, Michigan, Nov. 8-9, 1996.


“Best Case Practices of Technology at Eastern New Mexico University.” Calvin DeWitt, Scott Nutter, Mary Ayala, and Debra Hall. Mid-South Instructional Technology Conference, Middle Tennessee State University, Murfreesboro, Tennessee, April 6-8, 1997.

“A Measurement of the $^3$He/$^4$He Ratio in the Cosmic Radiation from 500 MeV/amu to 1100 MeV/amu”
Conferences Attended

Kentucky Academy of Sciences Fall 2009 Meeting, November 2009

International Cosmic Ray Conference, Lodz, Poland (July 2009)

American Physical Society April Meeting (Denver, CO) May 2009

Kentucky Academy of Sciences Fall 2008 Meeting, November 2008

International Cosmic Ray Conference, Merida Mexico (June 2007)

Kentucky Academy of Sciences Fall 2006 Meeting, November 2006

American Physical Society April Meeting, Dallas, April, 2006.

GEANT4 Tutorial, SLAC, Stanford, California, March, 2006.


Kentucky Academy of Sciences Fall 2004 Meeting, Murray, Kentucky, November 2004.

Ohio Section of the American Physical Society Spring 2004 Meeting, Athens, Ohio, April 2004.


Northern Kentucky University Education/Arts & Sciences mini-conference “Linking Content and Pedagogy: Strengthening Teacher Education.” NKU, May 2004


Kentucky Academy of Sciences Fall 2003 Meeting, Bowling Green, Kentucky, November 2003.

Ohio Section of the American Physical Society Fall 2002 Meeting, October 2002.


New Mexico Science Teachers Association Annual meeting, Hobbs, NM, October 1999.

Four Corners Section of the APS Sectional meeting, University of Arizona, Tucson, AZ, October 1999.

2nd Annual Mid-South Instructional Technology Conference, Middle Tennessee State University, Murfreesboro, Tennessee, April 6-8, 1997.


Four Corners Section of the APS Sectional meeting, University of New Mexico, Albuquerque, N.M., Spring 1998.


