Jeffery A. Secrest

CONTACT INFORMATION

Department of Chemistry & Physics
11935 Abercorn Street
Armstrong Atlantic State University
Savannah, Georgia 31419

Voice: (912) 344-2976
Fax: (912) 344-3433
E-mail: Jeffery.Secrest@Armstrong.edu
HTTP: chemphys.armstrong.edu/secrest

EDUCATION

College of William and Mary, Williamsburg, Virginia

Ph.D., Physics, December 2004

- Dissertation Topic: "Measurement of Electroweak Asymmetries in Polarized Electron-Proton Scattering at $0.1 < Q^2 < 0.4$ (GeV/c)^2"
- Advisor: Allison Lung

M.S., Physics, May 2001

University of Mississippi, Oxford, Mississippi

M.A., Physics, May 2000

University of Cincinnati, Cincinnati, Ohio

B.S., Physics, May 1997

PROFESSIONAL MEMBERSHIPS/AWARDS

- Breakthrough Prize 2015
- American Physical Society
- Member of the HALO collaboration, 2009-present
- Member of the SNO+ collaboration, 2008-present
- Member of the SNO collaboration, 2005-present
- Member of the G^0 collaboration, 2000-2005
- Outstanding Teaching Assistant Award, University of Mississippi, 1998

ACADEMIC EXPERIENCE

Associate Professor
Dept. of Chemistry and Physics, ASU **Autumn 2015 - Present**

- Currently developing software to simulate Type II supernovae for the HALO and SNO+ collaboartions
- Currently studying the energy systematics associated with the loading of heavy metals into liquid scintillator and methods to speed up code for analysis
- Member of SNO+ Board
- Guided undergraduate students in various particle physics and educational physics research: Zachery Russell and Tyler Allen

Assistant Professor
Dept. of Chemistry and Physics, AASU **Autumn 2009 - Summer 2015**

- Currently studying the energy systematics associated with the loading of heavy metals into liquid scintillator
- Software Czar for the HALO experiment
- Member of SNO+ Board
- Designed and implemented various detector geometries into HALO simulation code

- Verified optical properties of the SNO+ simulation code
- Teaching experience: calculus based introductory physics I & II, electrical circuits, junior level mechanics, junior level electricity and magnetism, mathematical methods for physicists, and computational techniques
- Guided undergraduate students in various particle physics and educational physics research: Kaye Archer, Brian Redden, Eric Yurko, Cindy Tetterton, Ryan Constatdine, Kelvin Benton, Cameron Braun, Joshua Ferrera, Sydney Toney, Zachery Russell and Tyler Allen

Postdoctoral Research Associate
Department of Physics, University of Pennsylvania **Winter 2005 - Summer 2009**

- Guided the work of graduate student, Tim Shokair. Worked together on monte carlo methods and building and debugging an electronics test-stand
- Analyzed energy and vertex systematics for SNO phase 3 data run
- Investigated analytic fitting of proportional counter pulses and determining pulse positions with Cepstral methods for SNO phase 3 data run
- Determined transfer function for proportional chamber electronics for SNO phase 3 data run
- Run Inspection Czar whose duties were daily analysis of previous day's data collection to ensure real time data quality control

Graduate Research Assistant
Department of Physics, College of William and Mary **Autumn 2000 - Winter 2004**

- Analyzed, corrected, and extracted asymmetries from G^0 engineering run data
- Analyzed cosmic run data during initial testing and calibrating of G^0 detectors
- Analyzed beam-line data in the injector to understand beam systematics for G^0

Grants and Fellowships

- Distigushed Gignilliat Fellowship, 2014
- Advanced Techniques for Loading Metals into Liquid Scintillators ", Armstrong Sub-Award $73,458. N. Tolich (PI), J. Klein (Co-PI), G. Orebi-Gann (Co-PI), J. Secrest (Co-PI) , M. Yeh (Co-PI). Accepted November 2012.

Teaching Experience

- Astronomy II
- Survey of Physics I with Calculus
- Survey of Physics II with Calculus
- Survey of Physics I with Trigonometry
- Survey of Physics II with Trigonometry
- Electricity and Magnetism
- Classical Mechanics
- Analog Electronics
- Mathematical Methods for Physicists
- Computational Physics
- Modern Physics
- Quantum Mechanics
- Introduction to Elementary Particle Physics

Selected Publications

W.H. Baird, **J.A. Secrest**, C.W. Padgett, "Electrical Power Quality", under review at The Physics Teacher

W.H. Baird, **J.A. Secrest**, C.W. Padgett, W. Johnson, and C. Hagrelius, "Smartphones and Time Zones", conditional acceptance at The Physics Teacher

S. Andringa, E. Arushanova, S. Asahi, M. Askins, D.J. Auty, A.R. Back, Z. Barnard, N. Barros, E.W. Beier, A. Bialek, S.D. Biller, E. Blucher, R. Bonventre, D. Braid, E. Caden, J. Caravaca, J. Carvalho, L. Cavalli, D. Chauhan, M. Chen, O. Chkvorets, K. Clark, B. Cleveland, I.T. Coulter, D. Cressy, X. Dai, C. Darrach, B. Davis-Purcell, R. Deen, M.M. Depatie, F. Descamps, F. Di Lodovico, N. Duhaime, F. Duncan, J. Dunger, E. Falk, N. Fatemighomi, R. Ford, P. Gorel, C. Grant, S. Grullon, E. Guillian, A.L. Hallin, D. Hallman, S. Hans, J. Hartnell, P. Harvey, M. Hedayatipour, W.J. Heintzelman, R.L. Helmer, M. Howe, B. Hreljac, J. Hu, T. Iida, C.M. Jackson, N.A. Jelley, C. Jillings, C. Jones, P.G. Jones, K. Kamdin, T. Kaptanoglu, J. Kaspar, P. Keener, P. Khaghani, L. Kippenbrock, J.R. Klein, R. Knapik, J.N. Kofron, L.L. Kormos, S. Korte, C. Kraus, C.B. Krauss, K. Labe, I. Lam, C. Lan, B.J. Land, S. Langrock, A. LaTorre, I. Lawson, G.M. Lefeuvre, E.J. Leming, J. Lidgard, X. Liu, Y. Liu, V. Lozza, S. Maguire, A. Maio, K. Majumdar, S. Manecki, J. Maneira, E. Marzec, A. Mastbaum, N. McCauley, A.B. McDonald, J.E. McMillan, P. Mekarski, C. Miller, E. Mony, M.J. Mottram, V. Novikov, H.M. O'Keeffe, E. O'Sullivan, G.D. Orebi Gann, M.J. Parnell, S.J.M. Peeters, T. Pershing, Z. Petriw, G. Prior, J.C. Prouty , S. Quirk, A. Reichold, A. Robertson, J. Rose, R. Rosero, P.M. Rost, J. Rumleskie, M.A. Schumaker, M.H. Schwendener, D. Scislowski, **J. Secrest**, M. Seddighin, L. Segui, S. Seibert, T. Shantz, T.M. Shokair, L. Sibley, J.R. Sinclair, K. Singh, P. Skensved, T. Sonley, R. Stainforth , M. Strait, M.I. Stringer, R. Svoboda, A. Sorensen, J. Tatar, L. Tian, N. Tolich, J. Tseng, H.W.C. Tseung, R. Van Berg, C. Virtue, B. von Krosigk, E. Vazquez-Jauregui, J.M.G. Walker, M. Walker, O. Wasalski, J. Waterfield, R.F. White, J.F. Wilkerson, J.R. Wilson, T.J. Winchester, A. Wright, M. Yeh, T. Zhao, K. Zuber [SNO+ Collaboration], "Current Status and Future Prospects of the SNO+ Experiment," Advances in High Energy Physics, vol. 2016, (2016)

W.H. Baird, C.W. Padgett, and **J.A. Secrest**, "Google Earth Science," Physics Education **50**2 (2014) 224

B. Aharmim, S.N. Ahmed, A.E. Anthony, N. Barros, E.W. Beier, A. Bellerive, B. Beltran, M. Bergevin, S.D. Biller, K. Boudjemline M.G. Boulay, B. Cai, Y.D. Chan, D. Chauhan, M. Chen, B.T. Cleveland, G.A. Cox, X. Dai, H. Deng, J.A. Detwiler, M. DiMarco, M.D. Diamond, P.J. Doe, G. Doucas, P. -L. Drouin, F.A. Duncan, M. Dunford, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, R.J. Ford, J.A. Formaggio, N. Gagnon, J. TM. Goon, K. Graham, E. Guillian, S. Habib, R.L. Hahn, A.L. Hallin, E.D. Hallman, P.J. Harvey, R. Hazama, W.J. Heintzelman, J. Heise, R.L. Helmer, A. Hime, C. Howard, M. Huang, P. Jagam, B. Jamieson, N.A. Jelley, M. Jerkins, K.J. Keeter, J.R. Klein, L.L. Kormos, M. Kos, C. Kraus, C.B. Krauss, A. Krueger, T. Kutter, C.C.M. Kyba, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, J.C. Loach, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, R. Martin, N. McCauley, A.B. McDonald, S.R. McGee, M.L. Miller, B. Monreal, J. Monroe, B.G. Nickel, A.J. Noble, H.M. O'Keeffe, N.S. Oblath, R.W. Ollerhead, G.D. Orebi Gann, S.M. Oser, R.A. Ott, S.J.M. Peeters, A.W.P. Poon, G. Prior, S.D. Reitzner, K. Rielage, B.C. Robertson, R.G.H. Robertson, M.H. Schwendener, **J.A. Secrest**, S.R. Seibert, O. Simard, J.J. Simpson, D. Sinclair, P. Skensved, T.J. Sonley, L.C. Stonehill, G. Tesic, N. Tolich, T. Tsui, R. Van Berg, B.A. VanDevender, C.J. Virtue, B.L. Wall, D. Waller, H. Wan Chan Tseung, D.L. Wark, P.J.S. Watson, J. Wendland, N. West, J.F. Wilkerson, J.R. Wilson, J.M. Wouters, A. Wright, M. Yeh, F. Zhang, K. Zuber [SNO Collaboration],"A Search for Astrophysical Burst Signals at the Sudbury Neutrino Observatory," Astropart.Phys. 55, (2014) 1-7

B. Aharmim, S.N. Ahmed, A.E. Anthony, N. Barros, E.W. Beier, A. Bellerive, B. Beltran, M. Bergevin, S.D. Biller, K. Boudjemline M.G. Boulay, B. Cai, Y.D. Chan, D. Chauhan, M. Chen, B.T. Cleveland, G.A. Cox, X. Dai, H. Deng, J.A. Detwiler, M. DiMarco, M.D. Diamond, P.J. Doe,

G. Doucas, P. -L. Drouin, F.A. Duncan, M. Dunford, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, R.J. Ford, J.A. Formaggio, N. Gagnon, J. TM. Goon, K. Graham, E. Guillian, S. Habib, R.L. Hahn, A.L. Hallin, E.D. Hallman, P.J. Harvey, R. Hazama, W.J. Heintzelman, J. Heise, R.L. Helmer, A. Hime, C. Howard, M. Huang, P. Jagam, B. Jamieson, N.A. Jelley, M. Jerkins, K.J. Keeter, J.R. Klein, L.L. Kormos, M. Kos, C. Kraus, C.B. Krauss, A. Krueger, T. Kutter, C.C.M. Kyba, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, J.C. Loach, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, R. Martin, N. McCauley, A.B. McDonald, S.R. McGee, M.L. Miller, B. Monreal, J. Monroe, B.G. Nickel, A.J. Noble, H.M. O'Keeffe, N.S. Oblath, R.W. Ollerhead, G.D. Orebi Gann, S.M. Oser, R.A. Ott, S.J.M. Peeters, A.W.P. Poon, G. Prior, S.D. Reitzner, K. Rielage, B.C. Robertson, R.G.H. Robertson, M.H. Schwendener, **J.A. Secrest**, S.R. Seibert, O. Simard, J.J. Simpson, D. Sinclair, P. Skensved, T.J. Sonley, L.C. Stonehill, G. Tesic, N. Tolich, T. Tsui, R. Van Berg, B.A. VanDevender, C.J. Virtue, B.L. Wall, D. Waller, H. Wan Chan Tseung, D.L. Wark, P.J.S. Watson, J. Wendland, N. West, J.F. Wilkerson, J.R. Wilson, J.M. Wouters, A. Wright, M. Yeh, F. Zhang, K. Zuber [SNO Collaboration],"Combined Analysis of all Three Phases of the Solar Neutrino Data from the Sudbury Neutrino Observatory," Phys. Rev. C **88**, (2013) 25501-25528

D. Androic, D.S. Armstrong, J. Arvieux, R. Asaturyan, T.D. Averett, S.L. Bailey, G. Batigne, D.H. Beck, E.J. Beise, J. Benesch, F. Benmokhtar, L. Bimbot, J. Birchall, A. Biselli, P. Bosted, H. Breuer, P. Brindza, C.L. Capuano, R.D. Carlini , R. Carr, N. Chant, Y.C. Chao, R. Clark, A. Coppens , S.D. Covrig, A. Cowley , D. Dale , C.A. Davis, C. Ellis, W.R. Falk , H. Fenker, J.M. Finn, T. Forest, G. Franklin, R. Frascaria, C. Furget, D. Gaskell, M.T.W. Gericke, J. Grames, K.A. Griffioen, K. Grimm, G. Guillard, B. Guillon, H. Guler, K. Gustafsson, L. Hannelius, J. Hansknecht, R.D. Hasty, A.M.Hawthorne Allen, T. Horn, T.M. Ito, K. Johnston, M. Jones, P. Kammel, R. Kazimi, P.M. King, A. Kolarkar, E. Korkmaz, W. Korsch, S. Kox, J. Kuhn, J. Lachniet, R. Laszewski, L. Lee, J. Lenoble, E. Liatard, J. Liu, A. Lung, G.A. MacLachlan, J. Mammei, D. Marchand, J.W. Martin, D.J. Mack, K.W. McFarlane, D.W. McKee, R.D. McKeown, F. Merchez, M. Mihovilovic, A. Micherdzinska, H. Mkrtchyan, B. Moffit, M. Morlet, M. Muether, J. Musson, K. Nakahara, R. Neveling, S. Niccolai, D. Nilsson, S. Ong, S.A. Page, V. Papavassiliou, S.F. Pate, S.K. Phillips, P. Pillot, M.L. Pitt, M. Poelker, T.A. Porcelli, G. Quemener, B.P. Quinn, W.D. Ramsay, A.W. Rauf, J.S. Real, T. Ries, J. Roche, P. Roos, G.A. Rutledge, J. Schaub, **J. Secrest**, T. Seva, N. Simicevic, G.R. Smith, D.T. Spayde, S. Stepanyan, M. Stutzman , R. Suleiman, V. Tadevosyan, R. Tieulent, J. van de Wiele, W.T.H. van Oers, M. Versteegen, E. Voutier, W.F. Vulcan, S.P. Wells, G. Warren, S.E. Williamson, R.J. Woo, S.A. Wood, C. Yan, J. Yun, V. Zeps [G0 Collaboration],"The G0 Experiment: Apparatus for Parity-Violating Electron Scattering Measurements at Forward and Backward Angles," Nucl. Instrum. Meth. A **646**, (2011) 59-86

B. Aharmim, S.N. Ahmed, A.E. Anthony, N. Barros, E.W. Beier, A. Bellerive, B. Beltran, M. Bergevin, S.D. Biller, K. Boudjemline M.G. Boulay, B. Cai, Y.D. Chan, D. Chauhan, M. Chen, B.T. Cleveland, G.A. Cox, X. Dai, H. Deng, J.A. Detwiler, M. DiMarco, M.D. Diamond, P.J. Doe, G. Doucas, P. -L. Drouin, F.A. Duncan, M. Dunford, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, R.J. Ford, J.A. Formaggio, N. Gagnon, J. TM. Goon, K. Graham, E. Guillian, S. Habib, R.L. Hahn, A.L. Hallin, E.D. Hallman, P.J. Harvey, R. Hazama, W.J. Heintzelman, J. Heise, R.L. Helmer, A. Hime, C. Howard, M. Huang, P. Jagam, B. Jamieson, N.A. Jelley, M. Jerkins, K.J. Keeter, J.R. Klein, L.L. Kormos, M. Kos, C. Kraus, C.B. Krauss, A. Krueger, T. Kutter, C.C.M. Kyba, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, J.C. Loach, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, R. Martin, N. McCauley, A.B. McDonald, S.R. McGee, M.L. Miller, B. Monreal, J. Monroe, B.G. Nickel, A.J. Noble, H.M. O'Keeffe, N.S. Oblath, R.W. Ollerhead, G.D. Orebi Gann, S.M. Oser, R.A. Ott, S.J.M. Peeters, A.W.P. Poon, G. Prior, S.D. Reitzner, K. Rielage, B.C. Robertson, R.G.H. Robertson, M.H. Schwendener, **J.A. Secrest**, S.R. Seibert, O. Simard, J.J. Simpson, D. Sinclair, P. Skensved, T.J. Sonley, L.C. Stonehill, G. Tesic, N. Tolich, T. Tsui, R. Van Berg, B.A. VanDevender, C.J. Virtue, B.L. Wall, D. Waller, H. Wan Chan Tseung, D.L. Wark, P.J.S. Watson, J. Wendland, N. West, J.F. Wilkerson, J.R. Wilson, J.M. Wouters, A. Wright, M. Yeh, F. Zhang, K. Zuber [SNO Collaboration],"Low Multiplicity Burst

Search at the Sudbury Neutrino Observatory," Astrophys. J. **728**, (2011) 83-94

B. Aharmim, S.N. Ahmed, A.E. Anthony, N. Barros, E.W. Beier, A. Bellerive, B. Beltran, M. Bergevin, S.D. Biller, K. Boudjemline M.G. Boulay, B. Cai, Y.D. Chan, D. Chauhan, M. Chen, B.T. Cleveland, G.A. Cox, X. Dai, H. Deng, J.A. Detwiler, M. DiMarco, M.D. Diamond, P.J. Doe, G. Doucas, P. -L. Drouin, F.A. Duncan, M. Dunford, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, R.J. Ford, J.A. Formaggio, N. Gagnon, J. TM. Goon, K. Graham, E. Guillian, S. Habib, R.L. Hahn, A.L. Hallin, E.D. Hallman, P.J. Harvey, R. Hazama, W.J. Heintzelman, J. Heise, R.L. Helmer, A. Hime, C. Howard, M. Huang, P. Jagam, B. Jamieson, N.A. Jelley, M. Jerkins, K.J. Keeter, J.R. Klein, L.L. Kormos, M. Kos, C. Kraus, C.B. Krauss, A. Krueger, T. Kutter, C.C.M. Kyba, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, J.C. Loach, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, R. Martin, N. McCauley, A.B. McDonald, S.R. McGee, M.L. Miller, B. Monreal, J. Monroe, B.G. Nickel, A.J. Noble, H.M. O'Keeffe, N.S. Oblath, R.W. Ollerhead, G.D. Orebi Gann, S.M. Oser, R.A. Ott, S.J.M. Peeters, A.W.P. Poon, G. Prior, S.D. Reitzner, K. Rielage, B.C. Robertson, R.G.H. Robertson, M.H. Schwendener, **J.A. Secrest**, S.R. Seibert, O. Simard, J.J. Simpson, D. Sinclair, P. Skensved, T.J. Sonley, L.C. Stonehill, G. Tesic, N. Tolich, T. Tsui, R. Van Berg, B.A. VanDevender, C.J. Virtue, B.L. Wall, D. Waller, H. Wan Chan Tseung, D.L. Wark, P.J.S. Watson, J. Wendland, N. West, J.F. Wilkerson, J.R. Wilson, J.M. Wouters, A. Wright, M. Yeh, F. Zhang, K. Zuber [SNO Collaboration], "Low Energy Threshold Analysis of the Phase I and Phase II Data Sets of the Sudbury Neutrino Observatory," Phys. Rev. C **81**, (2010) 55504-55557

B. Aharmim, S.N. Ahmed, A.E. Anthony, N. Barros, E.W. Beier, A. Bellerive, B. Beltran, M. Bergevin, S.D. Biller, K. Boudjemline M.G. Boulay, B. Cai, Y.D. Chan, D. Chauhan, M. Chen, B.T. Cleveland, G.A. Cox, X. Dai, H. Deng, J.A. Detwiler, M. DiMarco, M.D. Diamond, P.J. Doe, G. Doucas, P. -L. Drouin, F.A. Duncan, M. Dunford, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, R.J. Ford, J.A. Formaggio, N. Gagnon, J. TM. Goon, K. Graham, E. Guillian, S. Habib, R.L. Hahn, A.L. Hallin, E.D. Hallman, P.J. Harvey, R. Hazama, W.J. Heintzelman, J. Heise, R.L. Helmer, A. Hime, C. Howard, M. Huang, P. Jagam, B. Jamieson, N.A. Jelley, M. Jerkins, K.J. Keeter, J.R. Klein, L.L. Kormos, M. Kos, C. Kraus, C.B. Krauss, A. Krueger, T. Kutter, C.C.M. Kyba, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, J.C. Loach, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, R. Martin, N. McCauley, A.B. McDonald, S.R. McGee, M.L. Miller, B. Monreal, J. Monroe, B.G. Nickel, A.J. Noble, H.M. O'Keeffe, N.S. Oblath, R.W. Ollerhead, G.D. Orebi Gann, S.M. Oser, R.A. Ott, S.J.M. Peeters, A.W.P. Poon, G. Prior, S.D. Reitzner, K. Rielage, B.C. Robertson, R.G.H. Robertson, M.H. Schwendener, **J.A. Secrest**, S.R. Seibert, O. Simard, J.J. Simpson, D. Sinclair, P. Skensved, T.J. Sonley, L.C. Stonehill, G. Tesic, N. Tolich, T. Tsui, R. Van Berg, B.A. VanDevender, C.J. Virtue, B.L. Wall, D. Waller, H. Wan Chan Tseung, D.L. Wark, P.J.S. Watson, J. Wendland, N. West, J.F. Wilkerson, J.R. Wilson, J.M. Wouters, A. Wright, M. Yeh, F. Zhang, K. Zuber [SNO Collaboration], "Searches for High Frequency Variations in the ^{8}B Solar Neutrino Flux at the Sudbury Neutrino Observatory," Astrophys. J. **710**, (2010) 540-548

B. Aharmim, S.N. Ahmed, A.E. Anthony, N. Barros, E.W. Beier, A. Bellerive, B. Beltran, M. Bergevin, S.D. Biller, K. Boudjemline M.G. Boulay, B. Cai, Y.D. Chan, D. Chauhan, M. Chen, B.T. Cleveland, G.A. Cox, X. Dai, H. Deng, J.A. Detwiler, M. DiMarco, M.D. Diamond, P.J. Doe, G. Doucas, P. -L. Drouin, F.A. Duncan, M. Dunford, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, R.J. Ford, J.A. Formaggio, N. Gagnon, J. TM. Goon, K. Graham, E. Guillian, S. Habib, R.L. Hahn, A.L. Hallin, E.D. Hallman, P.J. Harvey, R. Hazama, W.J. Heintzelman, J. Heise, R.L. Helmer, A. Hime, C. Howard, M. Huang, P. Jagam, B. Jamieson, N.A. Jelley, M. Jerkins, K.J. Keeter, J.R. Klein, L.L. Kormos, M. Kos, C. Kraus, C.B. Krauss, A. Krueger, T. Kutter, C.C.M. Kyba, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, J.C. Loach, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, R. Martin, N. McCauley, A.B. McDonald, S.R. McGee, M.L. Miller, B. Monreal, J. Monroe, B.G. Nickel, A.J. Noble, H.M. O'Keeffe, N.S. Oblath, R.W. Ollerhead, G.D. Orebi Gann, S.M. Oser, R.A. Ott, S.J.M. Peeters, A.W.P. Poon,

G. Prior, S.D. Reitzner, K. Rielage, B.C. Robertson, R.G.H. Robertson, M.H. Schwendener, **J.A. Secrest**, S.R. Seibert, O. Simard, J.J. Simpson, D. Sinclair, P. Skensved, T.J. Sonley, L.C. Stonehill, G. Tesic, N. Tolich, T. Tsui, R. Van Berg, B.A. VanDevender, C.J. Virtue, B.L. Wall, D. Waller, H. Wan Chan Tseung, D.L. Wark, P.J.S. Watson, J. Wendland, N. West, J.F. Wilkerson, J.R. Wilson, J.M. Wouters, A. Wright, M. Yeh, F. Zhang, K. Zuber [SNO Collaboration],"Measurement of the Cosmic Ray and Neutrino-Induced Muon Flux at the Sudbury Neutrino Observatory," Phys. Rev. D **80**, (2009) 12001-12018

B. Aharmim, S.N. Ahmed, A.E. Anthony, N. Barros, E.W. Beier, A. Bellerive, B. Beltran, M. Bergevin, S.D. Biller, K. Boudjemline M.G. Boulay, B. Cai, Y.D. Chan, D. Chauhan, M. Chen, B.T. Cleveland, G.A. Cox, X. Dai, H. Deng, J.A. Detwiler, M. DiMarco, M.D. Diamond, P.J. Doe, G. Doucas, P. -L. Drouin, F.A. Duncan, M. Dunford, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, R.J. Ford, J.A. Formaggio, N. Gagnon, J. TM. Goon, K. Graham, E. Guillian, S. Habib, R.L. Hahn, A.L. Hallin, E.D. Hallman, P.J. Harvey, R. Hazama, W.J. Heintzelman, J. Heise, R.L. Helmer, A. Hime, C. Howard, M. Huang, P. Jagam, B. Jamieson, N.A. Jelley, M. Jerkins, K.J. Keeter, J.R. Klein, L.L. Kormos, M. Kos, C. Kraus, C.B. Krauss, A. Krueger, T. Kutter, C.C.M. Kyba, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, J.C. Loach, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, R. Martin, N. McCauley, A.B. McDonald, S.R. McGee, M.L. Miller, B. Monreal, J. Monroe, B.G. Nickel, A.J. Noble, H.M. O'Keeffe, N.S. Oblath, R.W. Ollerhead, G.D. Orebi Gann, S.M. Oser, R.A. Ott, S.J.M. Peeters, A.W.P. Poon, G. Prior, S.D. Reitzner, K. Rielage, B.C. Robertson, R.G.H. Robertson, M.H. Schwendener, **J.A. Secrest**, S.R. Seibert, O. Simard, J.J. Simpson, D. Sinclair, P. Skensved, T.J. Sonley, L.C. Stonehill, G. Tesic, N. Tolich, T. Tsui, R. Van Berg, B.A. VanDevender, C.J. Virtue, B.L. Wall, D. Waller, H. Wan Chan Tseung, D.L. Wark, P.J.S. Watson, J. Wendland, N. West, J.F. Wilkerson, J.R. Wilson, J.M. Wouters, A. Wright, M. Yeh, F. Zhang, K. Zuber [SNO Collaboration],"An Independent Measurement of the Total Active B-8 Solar Neutrino Flux Using an Array of He-3 Proportional Counters at the Sudbury Neutrino Observatory," Phys. Rev. Lett. **101**, (2008) 111301-111306

B. Aharmim, S.N. Ahmed, A.E. Anthony, N. Barros, E.W. Beier, A. Bellerive, B. Beltran, M. Bergevin, S.D. Biller, K. Boudjemline M.G. Boulay, B. Cai, Y.D. Chan, D. Chauhan, M. Chen, B.T. Cleveland, G.A. Cox, X. Dai, H. Deng, J.A. Detwiler, M. DiMarco, M.D. Diamond, P.J. Doe, G. Doucas, P. -L. Drouin, F.A. Duncan, M. Dunford, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, R.J. Ford, J.A. Formaggio, N. Gagnon, J. TM. Goon, K. Graham, E. Guillian, S. Habib, R.L. Hahn, A.L. Hallin, E.D. Hallman, P.J. Harvey, R. Hazama, W.J. Heintzelman, J. Heise, R.L. Helmer, A. Hime, C. Howard, M. Huang, P. Jagam, B. Jamieson, N.A. Jelley, M. Jerkins, K.J. Keeter, J.R. Klein, L.L. Kormos, M. Kos, C. Kraus, C.B. Krauss, A. Krueger, T. Kutter, C.C.M. Kyba, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, J.C. Loach, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, R. Martin, N. McCauley, A.B. McDonald, S.R. McGee, M.L. Miller, B. Monreal, J. Monroe, B.G. Nickel, A.J. Noble, H.M. O'Keeffe, N.S. Oblath, R.W. Ollerhead, G.D. Orebi Gann, S.M. Oser, R.A. Ott, S.J.M. Peeters, A.W.P. Poon, G. Prior, S.D. Reitzner, K. Rielage, B.C. Robertson, R.G.H. Robertson, M.H. Schwendener, **J.A. Secrest**, S.R. Seibert, O. Simard, J.J. Simpson, D. Sinclair, P. Skensved, T.J. Sonley, L.C. Stonehill, G. Tesic, N. Tolich, T. Tsui, R. Van Berg, B.A. VanDevender, C.J. Virtue, B.L. Wall, D. Waller, H. Wan Chan Tseung, D.L. Wark, P.J.S. Watson, J. Wendland, N. West, J.F. Wilkerson, J.R. Wilson, J.M. Wouters, A. Wright, M. Yeh, F. Zhang, K. Zuber [SNO Collaboration], "Measurement of the nu(e) and total B-8 solar neutrino fluxes with the Sudbury neutrino observatory phase I data set," Phys. Rev. C **75**, (2007) 45502-45580

B. Aharmim, S.N. Ahmed, A.E. Anthony, N. Barros, E.W. Beier, A. Bellerive, B. Beltran, M. Bergevin, S.D. Biller, K. Boudjemline M.G. Boulay, B. Cai, Y.D. Chan, D. Chauhan, M. Chen, B.T. Cleveland, G.A. Cox, X. Dai, H. Deng, J.A. Detwiler, M. DiMarco, M.D. Diamond, P.J. Doe, G. Doucas, P. -L. Drouin, F.A. Duncan, M. Dunford, E.D. Earle, S.R. Elliott, H.C. Evans, G.T. Ewan, J. Farine, H. Fergani, F. Fleurot, R.J. Ford, J.A. Formaggio, N. Gagnon, J. TM. Goon, K.

Graham, E. Guillian, S. Habib, R.L. Hahn, A.L. Hallin, E.D. Hallman, P.J. Harvey, R. Hazama, W.J. Heintzelman, J. Heise, R.L. Helmer, A. Hime, C. Howard, M. Huang, P. Jagam, B. Jamieson, N.A. Jelley, M. Jerkins, K.J. Keeter, J.R. Klein, L.L. Kormos, M. Kos, C. Kraus, C.B. Krauss, A. Krueger, T. Kutter, C.C.M. Kyba, R. Lange, J. Law, I.T. Lawson, K.T. Lesko, J.R. Leslie, I. Levine, J.C. Loach, R. MacLellan, S. Majerus, H.B. Mak, J. Maneira, R. Martin, N. McCauley, A.B. McDonald, S.R. McGee, M.L. Miller, B. Monreal, J. Monroe, B.G. Nickel, A.J. Noble, H.M. O'Keeffe, N.S. Oblath, R.W. Ollerhead, G.D. Orebi Gann, S.M. Oser, R.A. Ott, S.J.M. Peeters, A.W.P. Poon, G. Prior, S.D. Reitzner, K. Rielage, B.C. Robertson, R.G.H. Robertson, M.H. Schwendener, **J.A. Secrest**, S.R. Seibert, O. Simard, J.J. Simpson, D. Sinclair, P. Skensved, T.J. Sonley, L.C. Stonehill, G. Tesic, N. Tolich, T. Tsui, R. Van Berg, B.A. VanDevender, C.J. Virtue, B.L. Wall, D. Waller, H. Wan Chan Tseung, D.L. Wark, P.J.S. Watson, J. Wendland, N. West, J.F. Wilkerson, J.R. Wilson, J.M. Wouters, A. Wright, M. Yeh, F. Zhang, K. Zuber [SNO Collaboration],"A Search for Neutrinos from the Solar hep Reaction and the Diffuse Supernova Neutrino Background with the Sudbury Neutrino Observatory," Astrophys. J. **653**, (2006) 1545-1551

D.S. Armstrong, J. Arvieux, R. Asaturyan, T. Averett, S.L. Bailey, G. Batigne, D.H. Beck, E.J. Beise, J. Benesch, L. Bimbot, J. Birchall, A. Biselli, P. Bosted, E. Boukobza, H. Breuer, R. Carlini, R. Carr, N. Chant, Y.C. Chao, S. Chattopadhyay, R. Clark, S. Covrig, A. Cowley, D. Dale, C. Davis, W. Falk, J.M. Finn, T. Forest, G. Franklin, C. Furget, D. Gaskell, J. Grames, K.A. Griffioen, K. Grimm, B. Guillon, H. Guler, L. Hannelius, R. Hasty, A. Hawthorne Allen, T. Horn, K. Johnston, M. Jones, P. Kammel, R. Kazimi, P.M. King, A. Kolarkar, E. Korkmaz, W. Korsch, S. Kox, J. Kuhn, J. Lachniet, L. Lee, J. Lenoble, E. Liatard, J. Liu, B. Loupias, A. Lung, G.A. MacLachlan, D. Marchand, J.W. Martin, K.W. McFarlane, D.W. McKee, R.D. McKeown, F. Merchez, H. Mkrtchyan, B. Moffit, M. Morlet, I. Nakagawa, K. Nakahara, M. Nakos, R. Neveling, S. Niccolai, S. Ong, S. Page, V. Papavassiliou, S.F. Pate, S.K. Phillips, M.L. Pitt, M. Poelker, T.A. Porcelli, G. Quemener, B. Quinn, W.D. Ramsay, A.W. Rauf, J.S. Real, J. Roche, P. Roos, G.A. Rutledge, **J. Secrest**, N. Simicevic, G.R. Smith, D.T. Spayde, S. Stepanyan, M. Stutzman, V. Sulkosky, V. Tadevosyan, R. Tieulent, J. van de Wiele, W. van Oers, E. Voutier, W. Vulcan, G. Warren, S.P. Wells, S.E. Williamson, S.A. Wood, C. Yan, J. Yun, V. Zeps [G0 Collaboration], "Strange quark contributions to parity-violating asymmetries in the forward G0 electron-proton scattering experiment," Phys. Rev. Lett. **95**, (2005) 92001-92006

K. Kramer, D.S. Armstrong, T.D. Averett, W. Bertozzi, S. Binet, C. Butuceanu, A. Camsonne, G.D. Cates, Jian-Ping. Chen, Seonho Choi E. Chudakov, F. Cusanno, A. Deur, P. Djawotho, D. Dutta, J.M. Finn, H. Gao, F. Garibaldi, O. Gayou, Ronald A. Gilman, A. Glamazdin, V. Gorbenko, K.A. Griffioen, J.-O. Hansen, D.W. Higinbotham, W. Hinton, T. Horn, C.W. de Jager, X. Jiang, W. Korsch, J. LeRose, D. Lhuillier, N. Liyanage, D.J. Margaziotis, K. McCormick, Z.-E. Meziani, R. Michaels, B. Milbrath, B. Moffit, S. Nanda, C.F. Perdrisat, R. Pomatsalyuk, V. Punjabi, B. Reitz, J. Roche, R. Roche, M. Roedelbronn, N. Savvinov, **J. Secrest**, J. Singh, S. Sirca, K. Slifer, P. Solvignon, D.J. Steiner, R. Suleiman, V. Sulkosky, A. Tobias, A. Vacheret, Y. Xiao, X. Zheng, J. Zhou, L. Zhu, X. Zhu, P.A. Zolnierczuk ,"The Q**2-dependence of the neutron spin structure function g**n(2) at low Q**2," Phys. Rev. Lett. **95**, (2005) 142002-142007

Proceedings

H. Deng, S. McGee, M. Miller, N. Oblath, J. Secrest, N. Tolich, and H. Wan,"Pulse-shape analysis of NCD-array data at SNO", Nucl.Phys.Proc.Suppl. 221 (2011)

M.J. Ramsey-Musolf and J. Secrest, "Weak Interactions in Atoms and Nuclei: The Standard Model and Beyond: Quarks, Hadrons, and Nuclei", NUCL-TH/0305040

Internal Memos

J. Secrest, "A Snappy Sanity Study of the Steel Structure", HALO Internal Technical Document (2012)

J. Secrest and C. Tetterton, "Coding Standards and Guidelines for the HALO Experiment", HALO

Internal Technical Document (2011)

J. Secrest, "Verification of Rayleigh Scattering in RAT", SNO+ Internal Technical Document (2009)

H. Deng and J. Secrest, "Data Cleaning in the NCD Phase", SNO Internal Technical Document (2008)

J. Secrest, "Energy Systematics for the NCD Phase", SNO Internal Technical Document (2008)

Presentations /Posters

"Simulating Supernova Neutrinos in the HALO and SNO+ Detectors", J. Secrest and S. Toney, SEAPS 2014 Conference

"The Importance of Physics to the Emergence of a Scientific Psychology", M. Elcoro, J. Secrest, and J. Williams, 2014 Robert I Strozier Faculty Lecture Series

"Neutrinos: Cosmic Carriers of Clues to the Universe", J. Secrest, 2012 Robert I Strozier Faculty Lecture Series

"Status update on the HALO experiment", J. Secrest, 2012 APS Meeting, Atlanta, April 2012. Abstract: C7.00001

"Listening for Supernovae: The HALO Experiment", J. Secrest, 2011 Armstrong Faculty Research Symposium

"Pulse Shape Discrimination Techniques for the Neutral Current Detector Array at SNO", H. Deng et al, Neutrino 2006 XXII International Conference

"Monitoring Helicity Correlated Beam Properties in the CEBAF Injector", J. Secrest, 2003 APS Meeting, Philadelphia, PA, April 2003. Abstract K8 007

Invited Presentations

Symposium, University of Pennsylvania, 2010

Seminar, Armstrong Atlantic State University, 2009

Colloquium, Haverford College, 2008

Colloquium, SUNY Fredonia, 2008

High Energy Seminar, University of Cincinnati, 2005

Meetings/Conferences

- Aspen Center for Physics Conference: Particle Physics on the Verge of Another Discovery?, 2016
- PLANCK 2015
- Southeastern American Physical Society Meeting, 2014
- SNO+ Collaboration Meeting and Workshops, 2014
- HALO Collaboration Meeting, 2009-Present
- SNO+ Collaboration Meeting and Workshops, 2008-Present
- American Physical Society Meeting, 2012

- National Science Foundation Regional Grants Conference, 2011