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Education:

B.S. from Millsaps College, Honors in Physics, Phi Beta Kappa, May 1990

Ph.D. in Physics, North Carolina State University, December 1996

Title: *Parity Violation in ^{232}Th : A Study of the 'Sign Effect,'* Advisor: G. E. Mitchell

Positions:

9/15 to present *W. K. T. Sahn Professor in Physics*, Gettysburg College, Gettysburg, PA

9/12 to present *Professor of Physics*, Gettysburg College, Gettysburg, PA

6/11 – 8/13 *Chair*, Department of Physics, Gettysburg College, Gettysburg, PA

8/14 to present

8/09 – 12/09 *Resident Co-Director*, Interdisciplinary Study Abroad Program in England
Gettysburg College, Gettysburg, PA

9/04 – 9/12 *Associate Professor of Physics*, Gettysburg College, Gettysburg, PA

9/97 – 8/04 *Assistant Professor of Physics*, Gettysburg College, Gettysburg, PA

9/96 – 6/97 *Visiting Assistant Professor of Physics*, Millsaps College, Jackson, MS

Courses: Mathematical Methods for Physicists 2012, 2013; Introductory Quantum Mechanics 2011, 2012; Atomic and Nuclear Physics Laboratory 2010; Atomic and Nuclear Physics 2004, 2005, 2008, 2010; Statistical Mechanics and Thermodynamics 2001, 2004, 2006, 2010; Relativity and Modern Physics 2000, 2001; Relativity and Modern Physics Laboratory 2000, 2001; Introductory Modern Physics II (calculus-based) 2004, 2005, 2010; Introductory Modern Physics Laboratory I 2002, 2003, 2008; Introductory Modern Physics II Laboratory 2001, 2005, 2006, 2009 - 2011; First Year Seminar – Gender in Science 1998, 2000, 2001, 2008, 2010, 2012; History and Science of the Atomic Bombings of Japan (team taught with historian) 2006, 2009, 2012; Elementary Physics I (algebra-based) 2002, 2004, 2005; Elementary Physics Laboratory I 2001, 2002, 2004, 2005; Elementary Physics Laboratory II 2003, 2005; Interdisciplinary London-based Navigation Seminar 2009; Special Topics in Nuclear Physics 2009; Advanced Research Methods in Physics 2014;
Numerous Directed Studies, Summer Internships and Research Projects

Grants:

Principal Investigator, *RUI: Neutron Physics from ^4He to the Edge of the Dripline*. National Science Foundation Award, August 2012 - August 2015. Awarded \$144,802.

Principal Investigator, *MRI-Consortium: Development of a Neutron Detector Array by Undergraduate Research Students for Studies of Exotic Nuclei*. National Science Foundation Award, October 2009 - October 2012. Awarded \$118,271.

Requesting Faculty, *History 226: The Birth of a Deadly 'Boy': The History and Science of the Atomic Bombings of Japan* with Dina Lowy. Gettysburg College Johnson Center for Creative Teaching Fellowship, 2009. Awarded course release for team-teaching.

Co-Principal Investigator *Collaborative Visit with Eduard Sharapov* with Bret Crawford. Gettysburg College, Mellon Grant for Recently Tenured Faculty, 2008. Awarded \$8000.

Principal Investigator *Sabbatical: Optimization of Neutron-Based Diagnostics for ICF*, Laboratory for Laser Energetics, 2007. Awarded one-semester sabbatical leave.

Co-Principal Investigator, *Nuclear Diagnostics for LLE Experiments* with Steve Padalino. Laboratory for Laser Energetics, Summer 2007. Awarded \$15,140.

Co-Principal Investigator *RUI: United States-Russia Investigation of the Neutron-Neutron Scattering Length* with Bret Crawford. National Science Foundation Award, October 2006 - October 2010. Awarded \$150,000.

Requesting Faculty, *History 226: The Birth of a Deadly 'Boy': The History and Science of the Atomic Bombings of Japan* with Dina Lowy. Gettysburg College Johnson Center for Creative Teaching Fellowship, 2006. Awarded course release for team-teaching.

Principal Investigator, *Understanding the Time Signature of the YAGUAR reactor*. Gettysburg College Research and Professional Development Award, 2005. Awarded \$2,250.

Co-Principal Investigator, *Nuclear Diagnostics for LLE Experiments* with Steve Padalino, Charles Freeman, James McLean, David Geiger, Doug Baldwin, and Kurt Fletcher. Laboratory for Laser Energetics, October 2002 - September 2006. Awarded \$1,105,000.

Co-Principal Investigator, *Direct measurements of the nn-scattering cross section at the pulsed reactor YAGUAR* with Alexander Strelkov and Gary Mitchell. International Science and Technology Center, January 2003 - February 2008. Awarded \$300,000.

Principal Investigator, *A Direct Measurement of the Neutron-Neutron Scattering Length at YAGUAR*. National Science Foundation International Research Fellowship, January 2002 - October 2004. Awarded \$19,840.

Awards:

Johnson Center for Creative Teaching and Learning Excellence In Teaching Award, 2015.

Luther W. and Bernice L. Thompson Distinguished Teaching Award, 2004.

14th Louis Rosen Prize for the outstanding PhD thesis based on research performed at the Los Alamos Neutron Science Center, 1997.

US Department of Education Graduate Assistance in Areas of National Need Fellowship, 1994 - 1995.

Patricia Roberts Harris Fellowship, 1991 - 1994.

NCSU Alumni Award, 1990.

National Science Foundation Summer Junior Fellowship, 1989.

Selected Journal Publications in Physics:

“Neutron correlations in the decay of the first excited state of ^{11}Li ,” J.K. Smith, T. Baumann, D. Bazin, J. Brown, P.A. DeYoung, N. Frank, M.D. Jones, Z. Kohley, B. Luther, B. Marks, A. Spyrou, S.L. Stephenson, M. Thoennessen, A. Volya, *Nuclear Physics A* Volume 955 (2016) 27-40.

“Two-neutron sequential decay of ^{24}O ,” M. D. Jones, N. Frank, T. Baumann, J. Brett, J. Bullaro, P. A. DeYoung, J. E. Finck, K. Hammerton, J. Hinnefeld, Z. Kohley, A. N. Kuchera, J. Pereira, A. Rabeh, W. F. Rogers, J. K. Smith, A. Spyrou, K. Stiefel, S. Stephenson, M. Tuttle-Timm, R. G. T. Zegers, and M. Thoennessen, *Physical Review C* **92** (2015) 051306 (R).

“Population of ^{13}Be in Nucleon Exchange Reactions,” B.R. Marks, P.A. DeYoung, J.K. Smith, T. Baumann, D. Bazin, J. Brown, S. Casarotto, N. Frank, J. Hinnefeld, M. Hoffman, M.D. Jones, Z. Kohley, A.N. Kuchera, B. Luther, N. Smith, J. Snyder, A. Spyrou, S. Stephenson, C. Sullivan, M. Thoennessen, N. Viscariello, and S.J. Williams, *Physical Review C* **92** (2015) 054320/1-4.

“Unbound excited states of the N=16 closed shell nucleus ^{24}O ,” W.F. Rogers, S. Garrett, A. Grovum, R.E. Anthony, A. Aulie, A. Barker, T. Baumann, J.J. Brett, J. Brown, G. Christian, P.A. DeYoung, J.E. Finck, N. Frank, A. Hamann, R.A. Haring-Kaye, J. Hinnefeld, A.R. Howe, N.T. Islam, M.D. Jones, A.N. Kuchera, J. Kwiatkowski, E.M. Lunderberg, Luther, D.A. Meyer, S. Mosby, A. Palmisano, R. Parkhurst, A. Peters, J. Smith, J. Snyder, A. Spyrou, S.L. Stephenson, M. Strongman, B. Sutherland, N.E. Taylor, and M. Thoennessen, *Physical Review C* **9** (2015) 034316/1-5.

“Selective population of unbound states in ^{10}Li ,” J. K. Smith, T. Baumann, J. Brown, P. A. DeYoung, N. Frank, J. Hinnefeld, Z. Kohley, B. Marks, A. Spyrou, S. L. Stephenson, M. Thoennessen, and S. J. Williams, *Nuclear Physics A* **940** (2015) 235.

“Further insights into the reaction $^{14}\text{Be}(\text{CH}_2, \text{X})^{10}\text{He}$,” M.D. Jones, Z. Kohley, T. Baumann, G. Christian, P.A. DeYoung, J.E. Finck, N. Frank, R.A. Haring-Kaye, A.N. Kuchera, B. Luther, S. Mosby, J.K. Smith, J. Snyder, A. Spyrou, S.L. Stephenson, and M. Thoennessen, *Physical Review C* **91** (2015) 044312/1-6.

“Low-lying neutron unbound states in ^{12}Be ,” J. K. Smith, T. Baumann, D. Bazin, J. Brown, C. Casarotto, P. A. DeYoung, N. Frank, J. Hinnefeld, M. Hoffman, M. D. Jones, Z. Kohley, B. Luther, B. Marks, N. Smith, J. Snyder, A. Spyrou, S. L. Stephenson, M. Thoennessen, N. Viscariello, and S. J. Williams, *Physical Review C* **90** (2014) 024309/1-7.

“First observation of ^{15}Be ,” J. Snyder, T. Baumann, G. Christian, R. A. Haring-Kaye, P. A. DeYoung, Z. Kohley, B. Luther, M. Mosby, S. Mosby, A. Simon, J. K. Smith, A. Spyrou, S. Stephenson, and M. Thoennessen, *Physical Review C* **88** (2013) 031303(R).

“Unresolved question of the ^{10}He ground state resonance,” Z. Kohley, J. Snyder, T. Baumann, G. Christian, P. A. DeYoung, J. E. Finck, R. A. Haring-Kaye, M. Jones, E. Lunderberg, B.

Luther, S. Mosby, A. Simon, J. K. Smith, A. Spyrou, S. L. Stephenson, and M. Thoennessen, *Physical Review Letters* **109** (2012) 232501/1-5.

“Experiment on direct n-n scattering – the radiation-induced outgassing complication,” S. L. Stephenson, B. E. Crawford, W. I. Furman, E. V. Lychagin, A. Yu. Muzichka, G. V. Nekhaev, E. I. Sharapov, V. N. Shvetsov, A. V. Strelkov, B. G. Levakov, A. E. Lyzhin, Yu. I. Chernukhin, C. R. Howell, G. E. Mitchell, W. Tornow, R. A. Showalter-Bucher, *Nuclear Physics A* **895** (2012) 33 – 43.

“Background determination for the neutron-neutron scattering experiment at the reactor YAGUAR,” A. Yu. Muzichka, W.I. Furman, E.V. Lychagin, A. R. Krylov, G. V. Nekhaev, E. I. Sharapov, V. N. Shvetsov, A. V. Strelkov, B.G. Levakov, A.E. Lyzhin, Yu. I. Chernukhin, Ya. Z. Kandiev, C. R. Howell, G. E. Mitchell, B. E. Crawford, S. L. Stephenson, W. Tornow, *Nuclear Physics A*, **789** (2007) 30 – 45.

“Direct nn-scattering at the YAGUAR reactor,” B. E. Crawford, W. I. Furman, C. R. Howell, E. V. Lychagin, B. G. Levakov, V. I. Litvin, A. E. Lyzhin, E. P. Magda, G.E. Mitchell, A. Yu. Muzichka, G. V. Nekhaev, E. I. Sharapov, V. N. Shvetsov, S. L. Stephenson, A. V. Strelkov, W. Tornow, *Nuclear Instruments and Methods in Physics Research Section B*, no. 24 (2005) 190.

“A Direct Measurement of the Neutron-Neutron Scattering Length,” G. E. Mitchell, W. I. Furman, E. V. Lychagin, A. Yu. Muzichka, G. V. Nekhaev, A. V. Strelkov, E. I. Sharapov, V. N. Shvetsov, B. G. Levakov, V. I. Litvin, A. E. Lyzhin, E. P. Magda, B. E. Crawford, S. L. Stephenson, C. R. Howell, and W. Tornow, *Brazilian Journal of Physics*, no. 35 (2005) 850 – 853.

“Direct nn-Scattering Measurement with the Pulsed Reactor YAGUAR,” G. E. Mitchell, W. I. Furman, E. V. Lychagin, A. Yu. Muzichka, G. V. Nekhaev, A. V. Strelkov, E. I. Sharapov, V. N. Shvetsov, Yu. I. Chernuhin, B. G. Levakov, V. I. Litvin, A. E. Lyzhin, E. P. Magda, B. E. Crawford, S. L. Stephenson, C. R. Howell, and W. Tornow, *Journal of Research of the National Institute of Standards and Technology*, vol. 110 (2005) 225 – 230.

“Calculations of neutron spectra after neutron-neutron scattering,” B. E. Crawford, S. L. Stephenson, C. R. Howell, G. E. Mitchell, W. Tornow, W. I. Furman, E. V. Lychagin, G. V. Nekhaev, A. V. Strelkov, E. I. Sharapov, V. N. Shvetsov, *Journal of Physics G: Nuclear and Particle Physics*, **30** (2004) 1269 – 1285.

“Direct measurement of the neutron-neutron scattering cross section at the reactor YAGUAR,” W. I. Furman, E. V. Lychagin, A. Yu. Muzichka, G. V. Nekhaev, Yu. V. Safronov, A. V. Strelkov, E. I. Sharapov, V. N. Shvetsov, B. G. Levakov, V. I. Litvin, A. E. Lyzhin, E. P. Magda, C. R. Howell, G. E. Mitchell, W. Tornow, B. E. Crawford, S. L. Stephenson, and C. D. Bowman *Journal of Physics G: Nuclear and Particle Physics*, **28** (2002) 2627–2641.

“A measurement of the absolute neutron beam polarization produced by an optically pumped ^3He neutron spin filter,” D. R. Rich, J. D. Bowman, B. E. Crawford, P. P. J. Delheij, M. A. Espy, T. Haseyama, G. Jones, C. D. Keith, J. Knudson, M. B. Leuschner, A. Masaike, Y. Masuda, Y. Matsuda, S. I. Penttilä, V. R. Pomeroy, D. A. Smith, W. M. Snow, J. J. Szymanski, S. L. Stephenson, A. K. Thompson, and V. Yuan, *Nuclear Instruments & Methods in Physics Research, Section A*, **481** (2002) 431–453.

“Parity violation in neutron resonances of palladium,” D. A. Smith, J. D. Bowman, B. E.

Crawford, C. A. Grossmann, T. Haseyama, A. Msaïke, Y. Matsuda, G. E. Mitchell, S. I. Penttilä, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, S. L. Stephenson, and V. W. Yuan, *Physical Review C*, **65** (2002) 035503/1–9.

“Neutron Resonance spectroscopy of ^{104}Pd , ^{105}Pd , and ^{110}Pd ,” D. A. Smith, J. D. Bowman, B. E. Crawford, C. A. Grossmann, T. Haseyama, A. Msaïke, Y. Matsuda, G. E. Mitchell, S. I. Penttilä, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, S. L. Stephenson, A. M. Sukhovej, and V. W. Yuan, *Physical Review C*, **65** (2002) 024607/1–16.

“Parity violation in neutron resonances of antimony and iodine,” Y. Matsuda, J. D. Bowman, B. E. Crawford, P. P. J. Delheij, T. Haseyama, J. N. Knudson, L. Y. Lowie, A. Msaïke, Y. Masuda, G. E. Mitchell, S. I. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, S. L. Stephenson, Y. -F. Yen, and V. W. Yuan, *Physical Review C*, **64** (2001) 015501/1–7.

“Parity violation in neutron resonances of ^{117}Sn ,” D. A. Smith, J. D. Bowman, B. E. Crawford, C. A. Grossmann, T. Haseyama, Mikkel B. Johnson, A. Msaïke, Y. Matsuda, G. E. Mitchell, V. A. Nazarenko, S. I. Penttilä, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, L. M. Smotrisky, S. L. Stephenson, S. Tomsovic, and V. W. Yuan, *Physical Review C*, **64** (2001) 015502/1–9.

“Parity Violation in Neutron Resonances in ^{115}In ,” S. L. Stephenson, J. D. Bowman, F. Corvi, B. E. Crawford, P. P. J. Delheij, C. M. Frankle, M. Iinuma, J. N. Knudson, L. Y. Lowie, A. Msaïke, Y. Masuda, Y. Matsuda, G. E. Mitchell, S. I. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, H. M. Shimizu, Y.-F. Yen, V. W. Yuan, and L. Zanini, *Physical Review C*, **61** (2000) 045501/1–11.

“A high-rate ^{10}B -loaded liquid scintillation detector for parity-violation studies in neutron resonances,” Yi-Fen Yen, J. D. Bowman, R. D. Bolton, B. E. Crawford, P. P. J. Delheij, G. W. Hart, T. Haseyama, C. M. Frankle, M. Iinuma, J. N. Knudson, A. Msaïke, Y. Masuda, Y. Matsuda, G. E. Mitchell, S. I. Penttilä, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, J. M. Shimizu, D. A. Smith, S. L. Stephenson, J. J. Szymanski, S. H. Yoo, V. W. Yuan, *Nuclear Instruments & Methods in Physics Research, Section A*, **447** (2000) 476–489.

“New search for parity violation in nonresonant neutron scattering on thorium,” G. E. Mitchell, J. D. Bowman, B. E. Crawford, P. P. J. Delheij, C. M. Frankle, M. Iinuma, J. N. Knudson, L. Y. Lowie, A. Msaïke, Y. Matsuda, S. I. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, S. L. Stephenson, Y. -F. Yen, and V. W. Yuan *Physical Review C* **61**, (2000) 045503/1–4.

“Parity Violation in ^{232}Th Neutron Resonances above 250 eV,” E. I. Sharapov, J. D. Bowman, B. E. Crawford, P. P. J. Delheij, C. M. Frankle, M. Iinuma, J. N. Knudson, L. Y. Lowie, J. E. Lynch, A. Msaïke, Y. Matsuda, G. E. Mitchell, S. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, S. L. Stephenson, Y.-F. Yen and V. W. Yuan, *Physical Review C*, **61** (2000) 025501/1–7.

“Parity Nonconservation in ^{106}Pd , and ^{108}Pd Neutron Resonances,” B. E. Crawford, J. D. Bowman, P. P. J. Delheij, T. Haseyama, J. N. Knudson, L. Y. Lowie, A. Msaïke, Y. Matsuda, G. E. Mitchell, S. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, S. L. Stephenson, and V. W. Yuan, *Physical Review C*, **60** (1999) 055503/1-8.

“Apparatus for Parity-Violation Study Via Capture Gamma-Ray Measurements,” S. J. Seestrom, C. M. Frankle, J. D. Bowman, B. E. Crawford, Y. Haseyama, A. Masaike, A. Matsuda, S. I. Penttilä, N. R. Roberson, E. I. Sharapov, and S. L. Stephenson, *Nuclear Instruments & Methods in Physics Research, Section A*, **433** (1999) 603-613.

“Parity Violation in Neutron Resonances of ^{103}Rh ,” D. A. Smith, J. D. Bowman, B. E. Crawford, C. A. Grossmann, T. Haseyama, A. Masaike, Y. Matsuda, G. E. Mitchell, S. I. Penttilä, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, S. L. Stephenson, and V. W. Yuan, *Physical Review C*, **60** (1999) 045503/1-7.

“Neutron Resonance Spectroscopy of ^{103}Rh from 30 eV to 2 keV,” D. A. Smith, J. D. Bowman, B. E. Crawford, C. A. Grossmann, T. Haseyama, A. Masaike, Y. Matsuda, G. E. Mitchell, S. I. Penttilä, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, S. L. Stephenson, and V. W. Yuan, *Physical Review C*, **60** (1999) 045502/1-11.

“Parity Nonconservation in Neutron Resonances in $^{107,109}\text{Ag}$,” L. Y. Lowie, J. D. Bowman, F. Corvi, B. E. Crawford, P. P. J. Delheij, C. Frankle, M. Inuma, J. N. Knudson, A. Masaike, Y. Masuda, Y. Matsuda, G. E. Mitchell, S. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, H. M. Shimizu, S. L. Stephenson, Y.-F. Yen, V. W. Yuan, and L. Zanini, *Physical Review C*, **59** (1999) 1119–1130.

“Parity Nonconservation in Neutron Resonances in ^{133}Cs ,” E. I. Sharapov, J. D. Bowman, B. E. Crawford, P. P. J. Delheij, T. Haseyama, J. N. Knudson, L. Y. Lowie, A. Masaike, Y. Masuda, Y. Matsuda, G. E. Mitchell, S. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, S. L. Stephenson, Y.-F. Yen, and V. W. Yuan, *Physical Review C*, **59** (1999) 1772–1779.

“Search for Parity Violation in ^{93}Nb Neutron Resonances,” E. I. Sharapov, J. D. Bowman, B. E. Crawford, P. P. J. Delheij, C. Frankle, K. Fukuda, M. Inuma, J. N. Knudson, S. J. Lokitz, L. Y. Lowie, A. Masaike, Y. Masuda, Y. Matsuda, G. E. Mitchell, S. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, H. M. Shimizu, S. L. Stephenson, Y-F Yen, V. W. Yuan, *Physical Review C*, **59** (1999) 1131–1135.

“Neutron Resonance Spectroscopy of ^{117}Sn from 1 eV to 1.5 keV,” D. A. Smith, J. D. Bowman, B. E. Crawford, C. A. Grossmann, T. Haseyama, M. B. Johnson, A. Masaike, Y. Matsuda, G. E. Mitchell, V. A. Nazarenko, S. I. Penttilä, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, L. M. Smotritsky, S. L. Stephenson, and V. W. Yuan, *Physical Review C*, **59** (1999) 2836–2843.

“Parity Nonconservation in Neutron Resonances in ^{232}Th ,” S. L. Stephenson, J. D. Bowman, B. E. Crawford, P. P. J. Delheij, C. M. Frankle, M. Inuma, J. N. Knudson, L. Y. Lowie, A. Masaike, Y. Matsuda, G. E. Mitchell, S. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, Yi-Fen Yen, and V. W. Yuan, *Physical Review C*, **58** (1998) 1236–1246.

“Parity Nonconservation in Neutron Capture on ^{113}Cd ,” S. J. Seestrom, J. D. Bowman, B. E. Crawford, P. P. J. Delheij, C. M. Frankle, K. Fukuda, M. Inuma, J. N. Knudson, P. E. Koehler, L. Y. Lowie, A. Masaike, Y. Masuda, Y. Matsuda, G. E. Mitchell, S. Penttilä, Yu. P. Popov, H. Postma, N. R. Roberson, E. I. Sharapov, H. M. Shimizu, S. L. Stephenson, Yi-Fen Yen, and V. W. Yuan, *Physical Review C*, **58** (1998) 2977–2985.

“Parity Nonconservation in Neutron Resonances in ^{238}U ,” B. E. Crawford, J. D. Bowman, P. P. J. Delheij, C. M. Frankle, M. Inuma, J. N. Knudson, L. Y. Lowie, A. Masaike, Y. Matsuda, G. E. Mitchell, S. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, S. L. Stephenson, Yi-Fen Yen, and V. W. Yuan, *Physical Review C*, **58** (1998) 1225–1235.

“Neutron Resonance Spectroscopy of ^{106}Pd , and ^{108}Pd from 20–2000 eV,” B. E. Crawford, J. D. Bowman, P. P. J. Delheij, T. Haseyama, J. N. Knudson, L. Y. Lowie, A. MASAIKE, Y. Matsuda, G. E. Mitchell, S. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, S. L. Stephenson, and V. W. Yuan, *Physical Review C*, **58** (1998) 729–738.

“Neutron Resonance Spectroscopy of ^{107}Ag , and ^{109}Ag ,” L. Y. Lowie, J. D. Bowman, B. E. Crawford, P. P. J. Delheij, T. Haseyama, J. N. Knudson, A. MASAIKE, Y. Masuda, Y. Matsuda, G. E. Mitchell, S. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, S. L. Stephenson, Y.-F. Yen, and V. W. Yuan, *Physical Review C*, **56** (1997) 90–97.

“Observation of a Large Parity Non-conserving Effect in Xe,” J. J. Szymanski, W. M. Snow, J. D. Bowman, B. Cain, B. E. Crawford, P. P. J. Delheij, R. D. Hartman, T. Haseyama, C. D. Keith, J. N. Knudson, A. Komives, M. Leuschner, L. Y. Lowie, A. MASAIKE, Y. Matsuda, G. E. Mitchell, S. I. Penttilä, H. Postma, D. Rich, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, S. L. Stephenson, Yi-Fen Yen, and V. W. Yuan, *Physical Review C*, **53** (1996) R2576–R2580.

“Parity Violation in Neutron-Nucleus Scattering,” G. E. Mitchell, J. D. Bowman, B. E. Crawford, P. P. J. Delheij, C. M. Frankle, K. Fukuda, C. R. Gould, A. A. Green, D. G. Haase, M. Inuma, J. N. Knudson, L. Y. Lowie, A. MASAIKE, Y. Masuda, Y. Matsuda, S. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, H. M. Shimizu, S. L. Stephenson, Yi-Fen Yen, and V. W. Yuan, *Nuclear Data for Science, and Technology*, ed. J. K. Dickens (American Nuclear Society, La Grange Park, 1994) 208–214.

Cosmic Ray Detection at Ground Level, S. L. Stephenson, Honors Thesis, Millsaps College, Jackson, MS (1990).

Selected Publications in Literary Nonfiction:

“On Getting Dressed,” *Hippocampus*, December 2014.

“Eduard, Sasha and I Go to the Black Sea,” *Referential Magazine*, March 20, 2014.

“Doe Dose,” *Shenandoah*, volume 63, number 2, 2014.

“Approach,” *Redivider*, volume 11.1, 2013.

“All Skate,” *Connotation Press*, September 2013.

“Where Her Mind Is,” *real: stories true*, edited by Matt Potter. Pure Slush, 2012. 34 - 36.

“The Homing Mule,” *Dead Mule School of Southern Literature*, February 2012.

“From Russia with Gloves,” *Pure Slush*, February 11, 2012.

Conference Proceedings (Gettysburg undergraduates underlined):

“Search for $4n$ contributions in the reaction $^{14}\text{Be}(\text{CH}_2, \text{X})^{10}\text{He}$,” M. D. Jones, Z. Kohley, T. Baumann, G. Christian, P. A. DeYoung, J. E. Finck, N. Frank, R. A. Haring-Kaye, A. N. Kuchera, B. Luther, S. Mosby, J. K. Smith, J. Snyder, A. Spyrou, S. L. Stephenson, M. Thoennessen, in *21st International Conference on Few-Body Problems in Physics, Chicago, USA 2015*, EPJ Web of Conferences 113 06006 (2016).

“Structure and decay correlations of two-neutron systems beyond the dripline,” Z. Kohley, T. Baumann, D. Bazin, G. Christian, P. A. DeYoung, J. E. Finck, R. A. Haring-Kaye, J. Hinnefeld, N. Frank, E. Lunderberg, B. Luther, S. Mosby, W. A. Peters, J. K. Smith, J. Snyder, S. L. Stephenson, M. J. Strongman, A. Spyrou, M. Thoennessen, and A. Volya, in *3rd International Workshop on State of the Art in Nuclear Cluster Physics, Yokohama, Japan 2014*, Journal of Physics: Conference Series 569 012033 (2014).

“SPAGetty and the Gettysburg College 250-keV proton accelerator program in research and teaching,” S. L. Stephenson, B. E. Crawford, E. I. Sharapov, and C. Rossiter, in *Neutron Spectroscopy, Nuclear Structure, Related Topics: XXI International Seminar of Neutrons with Nuclei*, (Joint Institute for Nuclear Research, Dubna, Russia, 2014) 249-254.

“Nuclear structure physics with MoNA-LISA,” S. L. Stephenson, J. A. Brown, P. A. DeYoung, J. E. Finck, N. H. Frank, J. D. Hinnefeld, R. A. Kaye, B. A. Luther, G. F. Peaslee, D. A. Meyer, W. F. Rogers and the MoNA Collaboration, in *Neutron Spectroscopy, Nuclear Structure, Related Topics: XIX International Seminar of Neutrons with Nuclei*, (Joint Institute for Nuclear Research, Dubna, Russia, 2012) 138-144.

“Model of the gamma-ray induced out-gassing in the nn-scattering experiment at YAGUAR,” B. E. Crawford, R. A. Showalter-Bucher, S. L. Stephenson, W. I. Furman, E. V. Lychagin, A. Yu. Muzichka, G. V. Nekhaev, E. I. Sharapov, V. N. Shvetsov, and A. V. Strelkov, in *Neutron Spectroscopy, Nuclear Structure, Related Topics: XVIII International Seminar of Neutrons with Nuclei*, (Joint Institute for Nuclear Research, Dubna, Russia, 2011) 23-31.

“On the gas desorption problem in the nn-experiment at the YAGUAR reactor,” S. L. Stephenson, B. E. Crawford, D. A. Yager-Elorriaga, C. F. Pagan, E. I. Sharapov, R. A. Showalter-Bucher, A. Yu. Muzichka, W. I. Furman, E. V. Lychagin, A. R. Krylov, G. V. Nekhaev, V. N. Shvetsov, and A. V. Strelkov, in *Neutron Spectroscopy, Nuclear Structure, Related Topics: XVII International Seminar of Neutrons with Nuclei*, (Joint Institute for Nuclear Research, Dubna, Russia, 2010) 390-395.

“Comparison of calculated and measured yields of medical isotopes produced by electron bremsstrahlung,” V. N. Shvetsov, E. I. Sharapov, S. L. Stephenson, B. E. Crawford, in *Neutron Spectroscopy, Nuclear Structure, Related Topics: XVII International Seminar of Neutrons with Nuclei*, (Joint Institute for Nuclear Research, Dubna, Russia, 2010) 172-178.

“Current status of the experiment on the direct measurement of neutron-neutron scattering length at the reactor YAGUAR,” W. I. Furman, A. Yu. Muzychka, B. E. Crawford, C. R. Howell, Ya. Kandiev, B. G. Levakov, V. I. Litvin, E. V. Lychagin, G. E. Mitchell, G. V. Nekhaev, E. I. Sharapov, V. N. Shvetsov, S. L. Stephenson, A. V. Strelkov, Yu. I. Tchernukhin, W. Tornow, in *Neutron Spectroscopy, Nuclear Structure, Related Topics: XVI International Seminar of Neutrons with Nuclei*, (Joint Institute for Nuclear Research, Dubna, Russia, 2009) 45-53.

“Current status of the experiment on direct measurement of neutron-neutron scattering length at the reactor YAGUAR,” W. I. Furman, A. Yu. Muzychka, B. E. Crawford, C. R. Howell, Ya. Kandiev, B. G. Levakov, V. I. Litvin, E. V. Lychagin, A. E. Lyzhin, G. E. Mitchell, G. V. Nekhaev, E. I. Sharapov, V. N. Shvetsov, S. L. Stephenson, A. V. Strelkov, Yu. I. Tchernukhin, W. Tornow, in: *Nuclear Physics and Applications: Proceedings of the First Ulaanbaatar Conference on Nuclear Physics and Applications*, AIP Conference Proceedings, 1109 (2009) 53 - 58.

“On a coincidence measurement in the YAGUAR nn-experiment,” B. E. Crawford, E. I. Sharapov, S. L. Stephenson in *Neutron Spectroscopy, Nuclear Structure, Related Topics: XVI International Seminar of Neutrons with Nuclei*, (Joint Institute for Nuclear Research, Dubna, Russia, 2009) 54-60.

“An approach to the spatial-temporal analysis of the n-n collision rate in the YAGUAR experiment”, E.I. Sharapov, W. I. Furman, E.V. Lychagin, A.Yu. Muzichka, G.N. Nekhaev, A.V. Strelkov, V. N. Shvetsov, Yu. I. Chernukhin, Ya. Z. Kandiev, B.G.Levakov, V.I.Litvin, A.E.Lyzhin, G.E. Mitchell, B.E. Crawford, S.L. Stephenson, C.R.Howell, W.Tornow, in *XIII International Seminar on Interactions of Neutrons with Nuclei, ISINN-13*, E3-2006-7, (Joint Institute for Nuclear Research, Dubna, Russia, 2006) 30-136.

“A Direct Measurement of the Neutron-Neutron Scattering Length,” G. E. Mitchell, W. I. Furman, E. V. Lychagin, A. Yu. Muzichka, G. V. Nekhaev, A. V. Strelkov, E. I. Sharapov, V. N. Shvetsov, B. G. Levakov, V. I. Litvin, A. E. Lyzhin, E. P. Magda, B. E. Crawford, S. L. Stephenson, C. R. Howell, and W. Tornow, in *Proceedings of ICANS-XVII: The 17th Meeting of the International Collaboration on Advanced Neutron Sources*, Ed. G. J. Russell, J. J. Rhyne, B. V. Maes, LA-UR-3904 (Los Alamos National Laboratory, 2006) 888-890.

“Modeling the YAGUAR Reactor Neutron Field and Detector Count Rates for the Direct a_{nn} experiment,” B. E. Crawford, C. D. Bowman, W. I. Furman, C. R. Howell, B. G. Levakov, V. I. Litvin, E. V. Lychagin, A. E. Lyzhin, E. P. Magda, G. E. Mitchell, A. Yu. Muzichka, G. V. Nekhaev, Yu. V. Safronov, E. I. Sharapov, V. N. Shvetsov, S. L. Stephenson, A. V. Strelkov, and W. Tornow, in *FB17 – 17th International IUPAP Conference on Few-Body Problems in Physics*. Eds. W. Glöckle and W. Tornow (Elsevier B.V., 2004) S263

“Calculation of Neutron Velocity and Time-of-Flight Spectra in the DIANNA nn-scattering Experiment,” B. E. Crawford, S. L. Stephenson, W. I. Furman, E. V. Lychagin, A. Yu. Muzichka, G. V. Nekhaev, A. V. Strelkov, E. I. Sharapov, V. N. Shvetsov, C. R. Howell, W. Tornow, and G. E. Mitchell, *Xth International Seminar of Neutrons with Nuclei*, (Joint Institute for Nuclear Research, Dubna, Russia, 2004), p. 144 – 152.

“Monte Carlo modeling of the neutron field inside the YAGUAR through channel” S. L. Stephenson, C. D. Bowman, B. E. Crawford, C. B. Dallas, W. I. Furman, C. R. Howell, B. G. Levakov, V. I. Litvin, E. V. Lychagin, A. E. Lyzhin, E. P. Magda, G. E. Mitchell, M. E. Morris, A. Yu. Muzichka, G. V. Nekhaev, Yu. V. Safronov, E. I. Sharapov, V. N. Shvetsov, A. V. Strelkov, and W. Tornow , *Xth International Seminar of Neutrons with Nuclei*, (Joint Institute for Nuclear Research, Dubna, Russia, 2003), p. 427–435.

“Modeling the detector count rates in the YAGUAR nn-scattering experiment,” B. E. Crawford, C. D. Bowman, C. B. Dallas, W. I. Furman, J. R. Greece, C. R. Howell, B. G. Levakov, V. I. Litvin, E. V. Lychagin, A. E. Lyzhin, E. P. Magda, G. E. Mitchell, M. E. Morris, A. Yu. Muzichka, G. V. Nekhaev, Yu. V. Safronov, E. I. Sharapov, V. N. Shvetsov, S. L. Stephenson, A. V. Strelkov, and W. Tornow, *Xth International Seminar on Interaction of Neutrons with Nuclei*, (Joint Institute for Nuclear Research, Dubna, Russia, 2003), p. 436–446.

“Current Status of the Proposal for the Direct Measurement of the Neutron-Neutron Scattering Length at the Reactor YAGUAR,” W. I. Furman, E. V. Lychagin, A. Yu. Muzichka, G. V. Nekhaev, A. V. Strelkov, E. I. Sharapov, V. N. Shvetsov, B. G. Levakov, V. I. Litvin, A. E. Lyzhin, C. R. Howell, G. E. Mitchell, W. Tornow, C. D. Bowman, B. E. Crawford,

C. B. Dallas, J. R. Greece, M. E. Morris, and S. L. Stephenson, *Xth International Seminar on Interaction of Neutrons with Nuclei*, (Joint Institute for Nuclear Research, Dubna, Russia, 2003), p. 410–426.

“Current Condition of the Experimental Project on the Direct Measurement of Neutron Scattering Length on the YAGUAR Pulsed Reactor”, G. E. Mitchell for the DIANNA Collaboration (including S. L. Stephenson), in *IIIrd International Conference on Nuclear-pumped Lasers and Pulse Reactors*, Snezhinsk, Russia (2003), pp. 644.

“Modeling of the Neutron Field and Count Rate for the NN-Experiment,” G. E. Mitchell for the DIANNA Collaboration (including S. L. Stephenson), in *IIIrd International Conference on Nuclear-pumped Lasers and Pulse Reactors*, Snezhinsk, Russia (2003), pp. 632.

“Collision Rate in the Proposed nn-scattering Experiment at the Reactor YAGUAR,” S. L. Stephenson, B. E. Crawford, C. D. Bowman, W. Tornow, A. Yu. Muzichka and E. I. Sharapov, *IXth International Seminar on Interaction of Neutrons with Nuclei*, (Joint Institute for Nuclear Research, Dubna, Russia, 2001) p. 84–92.

“Thermal neutron fluxes at the reactor YAGUAR for the NN-scattering experiment,” B. G. Levakov, V. I. Litvin, A. E. Lyzhin, W. I. Furman, E. V. Lychagin, A. Yu. Muzichka, G. V. Nekhaev, A. V. Strelkov, E. I. Sharapov, V. N. Shvetsov, C. R. Howell, G. E. Mitchell, W. Tornow, C. D. Bowman, B. E. Crawford, and S. L. Stephenson, *IXth International Seminar on Interaction of Neutrons with Nuclei* (Joint Institute for Nuclear Research, Dubna, 2001), p. 27–32.

“Parity Violation in the Compound Nucleus,” G. E. Mitchell, J. D. Bowman, B. E. Crawford, P. P. J. Delheij, C. A. Grossmann, T. Haseyama, J. Knudson, L. Y. Lowie, A. Masaike, Y. Matsuda, S. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, D. A. Smith, S. L. Stephenson, Yi-Fen Yen, and V. W. Yuan, *Applications of Accelerators in Research, and Industry* (AIP Conference Proceedings 475, Woodbury, New York, 1999) 219–222.

“Parity Violation with Epithermal Neutrons,” G. E. Mitchell, J. D. Bowman, B. E. Crawford, P. P. J. Delheij, T. Haseyama, J. N. Knudson, L. Y. Lowie, A. Masaike, Y. Masuda, Y. Matsuda, S. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, S. L. Stephenson, Y.-F. Yen, and V. W. Yuan, *Nuclear Dynamics at Long, and Short Distances*, ed. H. Dias *et al.* (World Scientific, Singapore, 1997) 44–57.

“Study of Parity Nonconservation with Epithermal Neutrons,” S. J. Seestrom, J. D. Bowman, B. E. Crawford, P. P. J. Delheij, T. Haseyama, J. N. Knudson, A. Masaike, Y. Masuda, Y. Matsuda, G. E. Mitchell, S. Penttilä, Yu. P. Popov, H. Postma, N. R. Roberson, E. I. Sharapov, S. L. Stephenson, Yi-Fen Yen, and V. W. Yuan, *International Conference on Neutrons in Research, and Industry*, ed. G. S. Vourvopoulos (SPIE Vol. 2867, 1997) 388–397.

“Multiple Scattering Effect on (n,γ) Resonances,” S. L. Stephenson, J. D. Bowman, S. J. Seestrom, H. Postma, and E. I. Sharapov, *IVth International Seminar on Interaction of Neutrons with Nuclei*, (Joint Institute for Nuclear Research, Dubna, Russia, 1996) p. 171–176.

“Parity Violation in Neutron Resonances: the TRIPLE Collaboration Recent Results,” E. I. Sharapov, J. D. Bowman, B. E. Crawford, P. P. J. Delheij, C. M. Frankle, K. Fukuda, C. R. Gould, A. A. Green, D. G. Haase, M. Inuma, J. N. Knudson, L. Y. Lowie, A. Masaike, Y. Masuda, Y. Matsuda, G. E. Mitchell, S. Penttilä, Yu. P. Popov, H. Postma, N. R.

Roberson, S. J. Seestrom, H. M. Shimizu, S. L. Stephenson, Yi-Fen Yen, and V. W. Yuan, *Low Energy Nuclear Dynamics*, ed. Yu. Ogenessian, R. Kalpakchieva, and W. von Oertzen (World Scientific, Singapore, 1995) 138–146.

“Study of Parity, and Time-Reversal Violation in Neutron-Nucleus Interactions,” Yi-Fen Yen, J. D. Bowman, B. E. Crawford, P. P. J. Delheij, C. M. Frankle, K. Fukuda, C. R. Gould, A. A. Green, D. G. Haase, M. Iinuma, J. N. Knudson, L. Y. Lowie, A. Masaike, Y. Masuda, Y. Matsuda, G. E. Mitchell, S. Penttilä, H. Postma, N. R. Roberson, S. J. Seestrom, E. I. Sharapov, H. M. Shimizu, S. L. Stephenson, and V. W. Yuan, *Polarization Phenomena in Nuclear Physics*, ed. E. J. Stephenson, and S. E. Vigdor (AIP, New York, 1995) 120–135.

“Parity Violation in the Compound Nucleus,” J. D. Bowman, C. M. Frankle, A. A. Green, , J. N. Knudson, S. Penttilä, S. J. Seestrom, Yi-Fen Yen, V. W. Yuan, B. E. Crawford, N. R. Roberson, C. R. Gould, D. G. Haase, L. Y. Lowie, G. E. Mitchell, S. L. Stephenson, P. P. J. Delheij, E. I. Sharapov, H. Postma, Y. Masuda, H. M. Shimizu, M. Iinuma, A. Masaike Y. Matsuda, K. Fukuda, *Fifth Conference on Intersections of Particle, and Nuclear Physics*, ed. S. J. Seestrom (AIP, New York, 1995) 78–90.

Non-Presenting Conferences and Workshops:

The Kenyon Review Writers Workshop, June 13 – 20, 2015.

ALPhA’s Laboratory Immersion, Experiments on Photon Quantum Mechanics, June 2 – 4, 2015.

Workshop on the High-Rigidity Spectrometer for FRIB, July 10 – 11, 2014.

Grailville Workshop, Making Their Stories Your Own, September 7, 2013.

The Gordon Research Conference on Nuclear Chemistry, June 9 – 14, 2013.

The Gettysburg Review Conference for Writers, June 5 – 9, 2013.

The Gettysburg Review Conference for Writers, June 6 – 11, 2012.

20th International Seminar on Interaction of Neutrons with Nuclei : Fundamental Interactions and Neutrons, Nuclear Structure, Ultracold Neutrons, Related Topics. (ISINN 20), May 21 – 26, 2012.

The Gettysburg Review Conference for Writers, June 8 – 13, 2011.

Central Pennsylvania Consortium Workshop for Department and Program Chairs, May 11, 2011.

OMEGA EP Users Workshop, April 27 – 30, 2009.

Monte-Carlo N-Particle Transport Code (MCNPX) Intermediate Workshop, September 3 – 7, 2007.

OMEGA EP Users Workshop, May 30 – June 1, 2007.

Association for Women in Science (AWIS) Conference on Women in Science, Smith College, June 23 – 24, 2005.

Monte-Carlo N-Particle Transport Code (MCNPX) Introductory Workshop, January 14 - 18, 2002.

The American Physical Society Division of Nuclear Physics Annual Meeting, October 4 - 7, 2000.

Central Pennsylvania Consortium Teaching Workshop for New Faculty, February 5, 2000.

The American Association of Physics Teachers Workshop for New Physics Faculty, November 5 - 6, 1999.

The American Association of Physics Teachers Physics Revitalization Conference, October 2 - 4, 1998.

Selected Contributed Presentations (Gettysburg undergraduates underlined):

“Nuclear Structure and Reactions with MoNA-LISA,” S. L. Stephenson on behalf of the MoNA Collaboration, Joint DNP Town Meetings on Nuclear Structure and Nuclear Astrophysics, August 21-23, 2014 Mitchell Institute, Texas A & M University, http://www.nscl.msu.edu/~gade/download/BB_Master.pdf

“Update on the direct n-n scattering experiment at the reactor YAGUAR,” S. L. Stephenson et al., presented at the 2013 APS Division of Nuclear Physics meeting, <http://meetings.aps.org/link/BAPS.2013.DNP.HF.1>.

“Direct Measurement of the 1S_0 Neutron-Neutron Scattering Length at the YAGUAR Reactor,” S. L. Stephenson, B. E. Crawford, D. Kawamura, M. R. Schmidt, D. A. Yager-Elorriaga, C. R. Howell, W. Tornow, G. E. Mitchell, W. I. Furman, A. R. Krylov, E. V. Lychagin, A. Yu. Muzichka, G. V. Nekhaev, E. I. Sharapov, V.N. Shvetsov, A.V. Strelkov, B. G. Levakov, A. E. Lyzhin, Yu. I. Chernukhin, Ya. Z. Kandiev, presented at the 2007 APS Division of Nuclear Physics meeting, <http://meetings.aps.org/link/BAPS.2007.DNP.JH.1>.

“Incorporating Undergraduate Research with Accelerator Installation at Gettysburg College,” S. L. Stephenson, J. A. Acebal, B. E. Crawford, W. J. Shoemaker, Bulletin of the 18th International Conference on the Application of Accelerators in Research and Industry, (2004) (topical meeting of the American Physical Society).

“A Direct Measurement of the nn -Scattering Length at the YAGUAR Reactor,” S. L. Stephenson et al., Bulletin of the American Physical Society **47**, No. 6 (2002) 34.

“Parity Nonconservation in Neutron Resonances in $^{107,109}\text{Ag}$, and ^{93}Nb ,” S. L. Stephenson et al., Bulletin of the American Physical Society **43** (1998) 1579.

“Parity Nonconservation in ^{232}Th Neutron Resonances, and Confirmation of the ‘Sign Effect’,” S. L. Stephenson et al., Bulletin of the American Physical Society **42** (1997) 1667.

“Parity Violation in Neutron Resonances in Thorium,” S. L. Stephenson, et al., Bulletin of the American Physical Society **39**, (1994) 1825.

Undergraduate Research Presentations (Gettysburg undergraduates underlined):

2015 Division of Nuclear Physics Meeting, Sante Fe, NM: “Calibrations for studies of neutron-rich precursor fragments” Maria Mazza, Rachel Parkhurst, Samuel Wilensky, Michelle Mosby, Sharon Stephenson, and Warren Rogers.

2014 Division of Nuclear Physics Meeting, Waikoloa, HI: “Detector calibrations for fragmentation reactions with relativistic heavy ions at the NSCL” Heather Garland, Sharon Stephenson, Michelle Mosby and the MoNA Collaboration.

2011 Division of Nuclear Physics Meeting, East Lansing, MI: “Modeling Neutron Events in MoNA-LISA using MCNPX” Kendra Elliston, Alexander Peters, Kristen Stryker, Sharon Stephenson.

2010 Division of Nuclear Physics Meeting, Sante Fe, NM: “Construction of the Large-area multi-Institutional Scintillator Array (LISA) Neutron Detector,” Kaitlynn Rethmann, Kimberly Purtell, Autumn Haagsma, Casey DeRoo, Megan Jacobson, Steve Kuhn, Alexander Peters, Tim Nagi, Sam Stewart, Zack Tostrick, Mathieu Ndong, Rob Anthony, Hengzhi Chen, Alex Howe, Nicholas Badger, Matthew Miller, Brad Vest, Ben Foster, Logan Rice, Alegra Aulie, Amanda Govom, Philip Kasavan, Lewis Elliot.

2008 Division of Nuclear Physics Meeting, Oakland, CA: “Investigating Background Sources in the DIANNA Experiment using GEANT4 and MCNPX,” Ca’trish Pagan, Richard Showalter-Bucher, David Yager-Elorriaga, Bret Crawford, Sharon Stephenson.

2007 Division of Nuclear Physics Meeting, Williamsburg, VA: “DIANNA: Modeling the time dependence of the YAGUAR reactor pulse,” D. Kawamura, M.R. Schmidt, D.A. Yager-Elorriaga, B.E. Crawford, and S.L. Stephenson.

2007 Division of Nuclear Physics Meeting, Williamsburg, VA: “Modeling a Carbon Diagnostic System Using MCNPX,” S.H. Fay, C.M. Kuhn, E.E. Smith, S.L. Stephenson, T.C. Sangster, V. Glebov, and S.J. Padalino.

2006 Division of Plasma Physics Meeting, Philadelphia, PA: “Modeling a Graphite Diagnostic System using MCNPX,” J. Deaven, S.L. Stephenson, S.J. Padalino, V. Yu. Glebov, and T.C. Sangster.

2005 Council on Undergraduate Research (CUR) Posters on the Hill, Washington DC: “Refining a Fusion Energy Output Detection System Through Optimizing the Carbon Target Thickness,” Lauren Kate McNamara.

2005 Division of Plasma Physics Meeting, Denver, CO: “Gamma-Coincidence Modeling with MCNPX,” Jenna Deaven, Anne Emerson, Jamie Leiter, Sharon Stephenson and Kristen Toskes.

2005 Division of Nuclear Physics Meeting, Maui, HI: “Target Thickness Optimization of ^{12}C for Tertiary-Neutron Activation at OMEGA,” Jenna Deaven, Anne Emerson, Jamie Leiter, Lauren Kate McNamara, Sharon Stephenson and Kristen Toskes.

2002 Division of Nuclear Physics Meeting, East Lansing, MI: “Modeling detector efficiency for coincidence experiments,” W. S. Anderson, M. E. Morris, M. C. Johnson, S. L. Stephenson, S. J. Padalino, V. Yu. Glebov, S. Roberts, and T. C. Sangster.

2002 Division of Nuclear Physics Meeting, East Lansing, MI: “Tissue depth calculations for breast cancer using MCNPX,” C. B. Dallas, B. E. Crawford, and S. L. Stephenson.

2002 Division of Nuclear Physics Meeting, East Lansing, MI: “Modeling carbon activation,” M. C. Johnson, W. S. Anderson, M. E. Morris, S. L. Stephenson, S. J. Padalino, V. Yu. Glebov, S. Roberts, and T. C. Sangster.

2002 Division of Nuclear Physics Meeting, East Lansing, MI: “Determining Optimal Activated Graphite Thickness Using MCNPX,” M. E. Morris, W. Anderson, M. Johnson, S. L. Stephenson, S. Padalino, V. Yu. Glebov, S. Roberts, and T. C. Sangster.

2001 Division of Nuclear Physics Meeting, Maui, HI: “Angular Distribution Parameter Modeling for the YAGUAR Pulsed Reactor,” M. E. Morris, B. E. Crawford, and S. L. Stephenson.

2001 Division of Nuclear Physics Meeting, Maui, HI: “Neutron Density Simulation Studies Using MCNP,” C. B. Dallas, B. E. Crawford, and S. L. Stephenson.

2000 Centennial Conference Student Research Colloquium at Dickinson College: “Monte Carlo Simulation of Low-Energy Neutron Reaction, and the ‘Multiple-Scattering’ Effect,” Rakesh Mathur.

1999 Southeastern Pennsylvania Section of the American Association of Physics Teachers: “Computer Techniques, and Monte Carlo Simulations in Low Energy Neutron Physics,” Andy Danner.

1999 Southeastern Pennsylvania Section of the American Association of Physics Teachers: “Finite-Difference Methods for the Numerical Solution of Schrödinger’s Equation,” Jay Henniger.

Participation in Women’s/Gender Studies and Women in Physics:

Session panelist at the Mid-Atlantic Conference for Undergraduate Women in Physics, University of Maryland, January 17 – 19, 2014.

Chaired panel “A World Apart: Minority Women in the Sciences” at the 7th International Women’s Policy Research Conference, Washington DC, June 22 - 24, 2003.

“Russian Diary,” Sharon Stephenson, *CSWP Gazette*, Fall 2002, Vol. 21, No. 2, pp. 9 - 11.

“National Culture and Women in Physics: Liberté, égalité, ‘sorité’”, Sharon Stephenson and Meg Urry, *The Radiations of Sigma Pi Sigma*, Fall 2002, Vol. 8, Issue 2, pp. 5 - 9.

Presentation of a contributed talk (invited by the session chair) entitled “Learning From the World: Shifting Goals for the US Climate for Women in Physics” given at the American Physical Society meeting in Indianapolis, March 20, 2002.

US delegate to the IUPAP (International Union of Physics and Applied Physics) International Conference on Women in Physics, Paris, March 7 - 9, 2002.

Gettysburg College Women’s Studies Faculty Development Seminar, hosted by Rinita Mazumdar, Fall 2000.

“Conflicting Observations from the Same Lab: The Issue of Gendered Science,” master class for the Gettysburg College Alumni College program on June 1, 2000.

Gettysburg College Women’s Studies 120 Summer Workshop, hosted by Temma Berg, and Charlotte Armster, May 15 - 19, and June 15, 16, and 19, 2000.

“ ‘The Leaky Pipeline’ of Women in Physics: Why it Leaks, and How to Repair It,” presented talk to the Central Pennsylvania Consortium’s Annual Women’s Studies Conference at Gettysburg College on March 25, 2000.

“Breaking the Barriers: Women in Science, and Technology,” workshop at the 8th Annual Women’s Conference at Gettysburg College on February 19, 2000.

Invited Talks:

“Fundamental Symmetries,” with Chris Gould on November 7, 2015 at the 50th Anniversary of TUNL, Duke University.

“Making beautiful physics with the help of MoNA-LISA,” on April 28, 2015 at Ithaca College.

“The 17% and the climate for women in US physics programs,” on April 9, 2015 at Drexel University.

“Who are five female physicists I could ask?” on September 18, 2014 at the Society of Physics Students National Council Meeting in Washington, DC.

“The Physics Landscape for the American Female: Strange, perhaps Charming, with few at the Top” on April 12, 2014 at Coe College.

“Finding a former top-secret radioactive lemon and making lemonade: a nuclear physics experiment” on February 27, 2014 at Westmont College.

“MoNA-LISA and the rare, short-lived world of exotic nuclei” on April 12, 2012 at the State University of New York – Geneseo.

“Physics at the Neutron Dripline” on October 13, 2011 at Franklin and Marschall College.

“Few Body Physics on the Very Edge of Sanity: A Direct Measurement of the Neutron-Neutron Scattering Length” on April 10, 2008 at the State University of New York – Geneseo.

“Mining the Gap and Plugging the Leak: The Current Status for Women in Physics” on April 23, 2007 at Dickinson College.

“Mining for Diamonds: The Current Status for Women in Physics” on September 1, 2006 at Gettysburg College.

“Minding the Gap and Plugging the Leak: The Current Status for Women in Physics” on April 7, 2006 at James Madison University.

“Despairing the Disparity – The Broken Gender Symmetry in Physics” at Juniata College, April 2, 2004.

“Physics ‘Dis’parity – The Broken Gender Symmetry” for the Zone 12 Society of Physics Students Meeting at Southern Nazarene University, October 11, 2003.

“Despairing the Disparity – The Broken Gender Symmetry in Physics” at Juniata College, April 2, 2004.

“An Inherently Gendered Discipline? A Global Look at Women in Physics” on February 27, 2003 at Pennsylvania State University.

“A Direct Measurement of Neutron-Neutron Scattering: Working Towards an Understanding of Charge Symmetry” on February 13, 2003 at the State University of New York at Brockport.

“Women in Physics: A View Through An International Lens” on February 13, 2003 at the State University of New York at Brockport.

“A Direct Measurement of the nn Scattering Length” on February 22, 2002 at the National Superconducting Cyclotron Laboratory at Michigan State University.

“Nucleons Flying Through Doors, and Looking in Mirrors: A Study of the Weak Force via Parity Nonconservation” on April 5, 1999 at Bryn Mawr College.

“Captain James T. Kirk meets Agent Dana Scully: The Role of Gender in Science and Technology” on March 9, 1998 at Hampden-Sydney College.

Service:

College Service: Faculty Personnel Committee (08, 10); Academic Policy and Program Committee (04); Gettysburg College Dual-Degree Engineering Officer (98 - 11); Phi Beta Kappa Nominating Committee (04, 05); Presidential Search Committee (04); Counselor Visit Program Faculty Panel (10, 11); Parents Advisory Board Panel (10); Stock Writing Prize Judge (11, 13); Intercultural Resource Center Faculty Chat (12, 14).

Department Service: Department Search Committee (05, 06, 07, 08, 12 (Chair), 13 (Chair), 14 (Chair)); Adviser to Sigma Pi Sigma and the Society of Physics Students (04 - 08, 13); Chair (11 - 13, 14 - present).

Community Service: Gettysburg Child Care Corporation board (04 - 08); LEAP LEGO robotics after-school program faculty contact (04 - present); Montessori PTO Treasurer (11 - 12); American Youth Soccer Organization Assistant Coach (11); Montessori School Board, Treasurer (12 - 13); Montessori School Board, President (13 - 14).

Professional Service: Executive Director of the Modular Neutron Array Collaboration (13); National Science Foundation CAREER grant reviewer (10, 11); American Journal of Physics referee (07 - present); Department of Energy National Nuclear Security Administration National Laser Users' Review Panel (10, 14); National Science Foundation CCLI grant reviewer (99, 02); Facility for Rare Isotope Beams Congressional Visit (12, 13, 15, 16); External Review Chair, Lebanon Valley College Department of Physics (12); Executive Committee for the International Seminar on Interactions of Neutrons with Nuclei (12, 13, 15); External Reviewer for Promotion, Kalamazoo College (12); External Reviewer for Promotion, Hamilton College (15); External Reviewer, Bryn Mawr College Department of Physics (13); External Reviewer, Goucher College Department of Physics (15), External Reviewer, Connecticut College Department of Physics, Astronomy, and Geophysics (16).