

Paul Voytas

Education:

- Ph.D. (Physics) University of Wisconsin-Madison, December 1993  
Thesis Title: "A Target for Producing Polarized  $^{21}\text{Na}$  by Optical Pumping"  
Minor (Distributed) Astrophysics, Computer Science
- B. S. (Physics) University of Michigan-Ann Arbor, May 1986: With Distinction

**Professional Activities**

University Positions:

1994(Spring) Visiting Assistant Professor, Richard Stockton College of New Jersey (Pomona, NJ)  
1997-98 Faculty Assistant, University of Wisconsin-Madison  
1998-2004 Assistant Professor of Physics, Wittenberg University  
2004- Associate Professor of Physics, Wittenberg University

Other Professional Experience:

1987-93 Research Assistant, Experimental Nuclear Physics, University of Wisconsin-Madison  
1994-95 Research Associate, Experimental Nuclear Physics, SUNY at Stony Brook  
1995-98 Research Associate, University of Wisconsin-Madison  
1999 Proofreader and checker of problem sets for several chapters of a new  
introductory physics text book (Brooks-Cole Publishers)  
2003- Research Associate, University of Wisconsin-Madison (Summers)  
2008- Reviewer for American Journal of Physics

Current activities:

Research project on  $^{14}\text{O}$  and  $^{14}\text{C}$  beta decay with Univ. of Wisconsin-Madison.  
Ongoing project on Light Induced Atom Desorption.

Publications in Refereed Journals:

"Polarization transfer in the  $^{23}\text{Na}(\vec{p}, ^{23}\vec{Mg})n$ ,  $^{31}\text{P}(\vec{p}, ^{31}\vec{S})n$ , and  $^{35}\text{Cl}(\vec{p}, ^{35}\vec{Ar})n$  reactions"  
M.A. Miller, P.A. Voytas, A.D. Roberts, P.A. Quin, W. Haeberli,  
Phys. Rev. C 44 5 (1991) pp. 1995-2001

"Polarization Transfer in  $^{12}\text{C}(\vec{p}, ^{12}\vec{N})n$  at 120 and 150 MeV"  
P.A. Voytas, T.E. Pickering, W.K. Pitts, P.A. Quin, J.E. Schewe, J.E. Knott,  
T. Rinckel, J.J. Szymanski, Phys. Rev. C 47 2 (1993) pp. 860-862

"Nuclear  $\beta$  -decay constraints on tensor contributions in  $\pi \rightarrow e\nu\gamma$ "  
P. A. Quin, J. Deutsch, T.E. Pickering, J.E. Schewe, P.A. Voytas  
Phys. Rev. D 47 3 (1993) pp. 1247-1249

"Laser traps for radioactive isotopes"  
P.A. Voytas, J.A. Behr, A. Ghosh, G. Gwinner, L.A. Orozco, J.E. Simsarian,  
G.D. Sprouse, F. Xu, Hyp. Int. 97/98 (1996) p.529-534

"A target for producing polarized  $^{21}\text{Na}$  by optical pumping"  
P.A. Voytas, J.E. Schewe, P.A. Quin, L.W. Anderson,

Nucl. Instr. Meth. A374 (1996) pp. 7-11

“Magneto-optical trapping of  $^{210}\text{Fr}$  ”

J.E. Simsarian, A. Ghosh, G. Gwinner, L.A. Orozco, G.D. Sprouse, P.A. Voytas,  
Phys. Rev. Lett. 76 (1996) pp. 3522-25

“Measurement of the Polarization-Asymmetry Correlation for  $^{21}\text{Na}$  with novel target and polarimeter”

J.E. Schewe, P.A. Voytas, P.A. Quin

Nucl. Instrum. Meth., A390 (1997) 274-278.

“A magneto-optical trap loaded from a pyramidal funnel”

R. S. Williamson, P. A. Voytas, R. T. Newell, T. Walker  
Optics Express, Vol 3. No. 3, 111-117 (1998)

“Direct Measurement of the L/K ratio in  $^7\text{Be}$  Electron Capture”

P.A. Voytas, C. Ternovan, M. Galeazzi, D. McCammon, J.J. Kolata, P. Santi, D. Peterson,  
V. Guimarães, F.D. Becchetti, M.Y. Lee, T.W. O'Donnell, D. A. Roberts, S. Shaheen,  
Physical Review Letters, 88, 012501, (7 Jan, 2002).

“Revalidation of the Isobaric Multiplet Mass Equation”

M. C. Pyle, A. Garca, E. Tatar, J. Cox, B. K. Nayak, S. Triambak, B. Laughman,  
A. Komives, L. O. Lamm, J. E. Rolon, T. Finnessy, L. D. Knutson, and P. A. Voytas  
Physical Review Letters, 88, 122501, (7 Mar, 2002).

“Cryogenic Micro-Calorimeters for studies of LE implanted RNB's”

P. A. Voytas, Conference Proceedings of CAARI 2002.

“The Half-Life of  $^{66}\text{Ga}$ ”

G. W. Severin, L. D. Knutson, P. A. Voytas, E. A. George  
Physical Review C, 82, 067301 (2010).

“A Superconducting Beta Spectrometer”

L. D. Knutson, G. W. Severin, S. L. Cotter, Li Zhan, P. A. Voytas, and E. A. George  
Review of Scientific Instruments, 82, 073302 (2011).

#### Contributions to Professional Conferences:

“A Beta-Decay Test for Right-Handed Currents in the Weak Interaction”

P.A. Voytas, J.E. Schewe, and P.A. Quin,  
Bulletin of the American Physical Society, vol. 34, no. 8 (1989) p. 1819

“Nuclear Beta Decay Coupling Constants-A New Global Analysis”

P.A. Voytas, T. Pickering, J.E. Schewe, and P.A. Quin,  
Bulletin of the American Physical Society, vol. 36, no. 8 (1991) p. 2154

“On-Line Optical Pumping of  $^{21}\text{Na}$  ”

P.A. Voytas, J. E. Schewe, L.W. Anderson, and P.A. Quin,  
Bulletin of the American Physical Society, vol. 37, no. 5 (1992) p. 1272

“Target for Producing Polarized  $^{21}\text{Na}$  by Optical Pumping ”

P.A. Voytas, J.E. Schewe, P.A. Quin, L.W. Anderson, and R.E. Miers,

Workshop on Polarized Ion Sources and Polarized Gas Targets, AIP Conference Proceedings 293, (1994) p. 208

“Laser trapping of  $^{210}\text{Fr}$ ”

P.A. Voytas, J.E. Simsarian, A. Ghosh, G. Gwinner, L.A. Orozco, G.D. Sprouse, Post Deadline contributed paper presented at Fall, 1995 American Physical Society Division of Nuclear Physics meeting in Bloomington, IN

“ $^{38}\text{K}$ ,  $^{37}\text{K}$  laser trapping and  $\beta$ -decay measurements.”

Invited paper presented at the Division of Nuclear Chemistry and Technology of the American Chemical Society. April 15, 1997 San Francisco, CA

“Modeling a new superconducting beta spectrometer for a CVC test in  $^{14}\text{O}$  beta decay”  
Division of Nuclear Physics Fall Meeting, Chicago, 2004

“Investigating Tangential Acceleration in the Laboratory with a Rotation Wheel”

Elizabeth George, Paul Voytas, Lynn Knutson, Gregory Severin  
American Association of Physics Teachers Summer Meeting, Ann Arbor, 2009

“Determination of the ground state branching ratio in  $^{14}\text{O} \rightarrow ^{14}\text{N}$  beta decay”

Paul Voytas, Elizabeth George, Lynn Knutson, Gregory Severin  
American Physical Society April Meeting, Denver, 2013

“The shape of the  $^{66}\text{Ga} \rightarrow ^{66}\text{Zn}$  ground state beta decay spectrum”

American Physical Society April Meeting, Denver, 2013

#### Other Presentations:

Nuclear physics seminar at University of Wisconsin-Madison Nov. 9, 1995

“Laser trapping of Radioactive Atoms”

Physics Department seminar at Wittenberg University February 6, 1999

“The Weird and Wacky World of Weak Interactions”

“Cryogenic (Micro-calorimetric) Detectors” Presented at the Town Meeting on  
Opportunities in Nuclear Astrophysics

Held at the University of Notre Dame, June, 1999 Sponsored by the Division of  
Nuclear Physics of the American Physical Society

Physics Seminar at University of Michigan April 9, 2001

“Direct Measurement of the L/K ratio in  $^7\text{Be}$  Electron Capture”

Physics Seminar at Miami University April 3, 2002

“Direct Measurement of the L/K ratio in  $^7\text{Be}$  Electron Capture”

Physics Seminar at Indiana University April 3, 2006

“Oxygen-14 beta decay and the Standard Model”

#### Professional Memberships:

American Physical Society (since 1987)

Division of Nuclear Physics

Division of Laser Science

Division of Atomic, Molecular and Optical Physics

Forum on Physics and Society

Forum on Education  
Ohio Region Section of the American Physical Society  
American Association of Physics Teachers (since 1988)  
Southern Ohio Section of American Association of Physics Teachers