



American Association of Physics Teachers

2010 Candidates for National Office

Vice-President



Dwain M. Desbien

Math, Physics & Engineering Division, Estrella Mountain Community College, 3000 N Dysart Rd, Avondale, AZ 89392, dwain.desbien@estrellamountain.edu

Education: BA in Physics, Grinnell College (1990), MS in Physics, University of Kansas (1993), Ph.D. Physics Education, Arizona State University (2002).

Professional Experience: Physics Instructor, Highland Community College (1993-1996), Adjunct Physics Instructor, Chandler-Gilbert

Community College (1997-2001), Physics Instructor, Estrella Mountain Community College (2001-present), Division Chair of Science and Mathematics Division, Estrella Mountain CC (2003-2009).

Memberships: AAPT and Arizona Section of the AAPT.

AAPT Activities: At large member of the AAPT executive board (2006-2009), Served on the nominating committee, the committee on physics in two-year colleges, and committee on physics in undergraduate education. Talks and/or posters at most AAPT national meetings since 1996. President of Arizona AAPT section (2001-2003).

Other Activities: AIP Advisory Committee on Physics Education 2009-present, Co-PI ATE Project for Physics Faculty (NSF/DUE 0603272) 2006-present, Lead or Co-Lead workshops for TYC Physics Workshop Project, Universities and Colleges including Arizona State University, Drury University, and Tecnológico De Monterrey, various public schools from Middle School to High School including the PTRA program.

Commentary: I became an AAPT member while a graduate student at the University of Kansas as part of a GTA award. I fell in love with *The Physics Teacher* and continued to belong to the AAPT (admittedly on and off) for the rest of my time at KU. During my career, AAPT has played a larger and larger roll in how I teach and how I find colleagues with whom to collaborate and share information. As a single person physics department, I value the opportunity AAPT continues to provide for sharing and discussing physics with other teachers of physics.

I've experienced firsthand the vital role that AAPT plays in the lives of physics teachers at all levels, from High School educators to those teaching graduate students at research universities. AAPT needs to have a strong financial base to run programs for this wide range of individuals. We face the challenge of effectively serving such a diversity of faculty and student learning. However, with the strength of AAPT's membership and strong volunteers AAPT can continue to provide programs for all its constituents. In these tough economic times AAPT needs to evaluate all its programs and carefully develop new ones based upon how to best serve the physics teaching community. We need to look at how we can improve our services to physics teachers but understand that we can only expand as our revenue allows.

I would like to help AAPT seriously look at how and if we can grow our membership. We need to have a discussion as an organization about what role the meetings play and how they can serve a larger portion of the membership (if possible). We need to get more individuals involved in leading AAPT at the local, national, and international level. I hope to serve AAPT again and address the tough issues facing our organization today.



Jill A. Marshall

Science and Mathematics Education, University of Texas, Austin, TX 78712-0382. marshall@mail.utexas.edu

Education: BS (Physics), Stanford University (1980), PhD (Physics) University of Texas, Austin (1984)

Professional Experience: Southwest Research Institute (1984-85, Research Scientist, 1985-87 Senior Research Scientist, 1987-94, Manager Sensor Design and Calibration); Utah State University, Physics Department (1994-98

Assistant Professor, 1998-01 Associate Professor), University of Texas Systemic Research Collaborative for Education in Mathematics, Science and Technology (2001-02, Assistant Director); University of Texas Science and Mathematics Education (2002-08 Assistant Professor, 09- Associate Professor)

Memberships: AAPT and AAPT Texas Section, American Geophysical Union, American Association for the Advancement of Science, National Association of Research in Science Teaching, American Educational Research Association

Honors: University of Texas College of Education Dean's Fellowship, 2008; Utah State University College of Science Teacher of the Year, 1997; USU President's Leadership Council Faculty Member of the Year, 1996-97

AAPT Activities: President Idaho/Utah Section 1999-00, Executive Committee of the Texas Section (VP, President Elect, President, Immediate Past President, Past President) 2005-09; National Nominating Committee 2005-06; Committee on Women in Physics 2006-09; presenter and session organizer at national meetings 1998- ; publications in the *American Journal of Physics PER Supplement* and *The Physics Teacher*, 1997-.

Other Activities: PhysTEC Advisory Committee (2005-07); PTEC Editorial Board (2008-); Girl Scouts of Central Texas STEM Advisory Committee (2008-); University of Texas Physics Department Integrative Graduate Education and Research Traineeship (IGERT) Executive Committee (2007-); Co-PI University of Texas Environmental Science Institute GK-12 Project (2007-); University Space Research Association Science and Engineering Education Council (1999-02); PI and Co-I for NASA and NSF projects, including Program for Women and Girls, Elementary, Secondary and Informal Science, and CCLI; workshops for students and teachers, (1992-); KUSU Outreach Utah Science Hour commentator (1997-00).

Commentary: I was surprised and deeply honored at the request to run for VP. Filling a leadership role in AAPT is not a task I would take on lightly or without thoughtful consideration. Our organization faces many challenges as well as opportunities. Its governance requires considerable dedication, as well as a vision of its future. But, with your support, these are challenges I am willing and excited to undertake. My vision includes three key elements. First is sound fiscal stewardship. Financial security is not our reason for being, but our primary mission of serving the physics teacher community will not be possible without it. Second is maintaining and preserving the valuable work that we do in AAPT. Archiving the products of meetings, committee work, and other AAPT initiatives, and making them accessible, will ensure that what we do has the maximum impact for years to come. We have an excellent model to follow in the high quality contributions and online accessibility of our journals. Third is teacher preparation and professional development, especially outreach to new physics teachers. The future of our organization ultimately is in their hands. Toward these ends I will apply my time, energy and experience. Most important, I will seek the advice, feedback, and help of my colleagues in AAPT. I will be calling on you, just as you called on me!

College/University Member at Large



Sam M. Sampere

Syracuse University, Department of Physics, 201 Physics Building, Syracuse, NY 13244 smsamper@syr.edu

Education: B.S. LeMoyne College (1986), M.S. State University of New York at Binghamton (1990)

Professional Experience: Lab and Demonstration Manager (1994 – pres), Syracuse University; Department of Physics, manager of Syracuse University Surface Imaging Laboratory (2008 - pres); Adjunct

Physics Instructor (1995 – present), LeMoyne College.

Memberships: AAPT, PIRA, New York State Section AAPT

AAPT Activities: Chair of Committee on Apparatus (2008-09), Committee on Apparatus (2007-08), President of PIRA (2005-06), Nomination Committee (2002-03), Committee on Laboratories (2001-02), Bauder Fund Committee (2001)

Other Activities: Co-leader or presenter of Lecture Demonstration Workshops (1996-pres.), emcee of numerous AAPT Demonstration Shows, host of Summer Meeting (2006), Apparatus Competition judge, co-organizer of Syracuse University Saturday Morning High School Physics Teacher Workshops, awarded Physics 2005 Outreach grant

Commentary: My career choices have been motivated by two main desires. We all search for ways to help students discover a passion for learning science, physics in particular. As we all know, that is a daunting task. I explore this dilemma through physics demonstrations, public shows, and museum exhibits, and have sought to bring this world to everyone within AAPT and to the public in general. I also want to bridge between the different AAPT constituencies. I have sought to establish a dialogue with PIRA members, high school teachers, and college faculty. We all have different areas of expertise. We should learn from each other. AAPT is the perfect place to foster such an environment and watch that flourish.



Steve L. Shropshire

Professor and Chair, Department of Physics, Idaho State University, Mail Stop 8106, Pocatello, ID 83209; shropshi@physics.isu.edu

Education: B.S., Physics (1985) and Mathematics (1985), Ph.D., Physics (1991), Washington State University

Professional Experience: Idaho State University: Chair, Department of Physics (2009 – present); Professor of Physics (2007 - present); Associate Professor of Physics (1997 - 2007); Assistant Professor (1992 - 1997);

Visiting Assistant Professor (1991 - 1992).

Memberships: AAPT, Idaho-Utah Section of AAPT, PIRA, Idaho Science Teachers Association, Idaho Academy of Science

AAPT Activities: Committee on Science Education for the Public, Chair (2005 - 2007), member (2004 - 2007, 2009 - present); PTRS Advisory Committee (2006 - present); Workshop Leader, Physics on the Road (2003 - 2005); organized spring 1998 and 2004 meetings of the Idaho-Utah Section; World Year of Physics Committee (2004 - 2005); Rural Regional Coordinator for PTRS (2004 - 2007); Section Representative for Idaho and Utah (1999 - 2006); Idaho-Utah Section, President (1998), Vice President (1997, 2009); Committee on Pre-High School Education, Chair (2001 - 2003), member (1998 - 2003); organized the Demo Show at the 2002 Summer Meeting in Boise, Idaho.

Other Activities: SPS Zone Councilor for Zone 15 (2006 - present); Director of ISU QuarkNet Center (2004 - present); Higher Education Representative with service on the Board, Idaho Science Teachers Association (2003 - present); Director, ISU Physics Demo Road Show and Teacher Workshop program.

Recent Awards: AAPT Distinguished Service Citation (2008), Idaho Academy of Science Distinguished Science Communicator Award (2007), Idaho State University Achievement Award (2006), Idaho State University Distinguished Public Servant (2006), Salvation Army Community Hero (2003).

Commentary: Since my first experience with AAPT in 1992 at a section meeting, I have been an AAPT junkie. I just cannot get enough of you, my colleagues. Your knowledge, wisdom, and enthusiasm for physics and physics teaching have inspired and nurtured me. I cannot put a price on the impact this has had on my teaching and service to my community and profession. I am excited at the opportunity to give back to the organization that has meant so much to me. The AAPT is the premier national organization and authority on physics and physical science education. As such, it has the potential to influence state and national policies and priorities in science education, as well as public perception of science and its importance to society. I applaud recent policy and legislative efforts by the AAPT, such as public policy statements on the education of future teachers, the teaching of evolution and cosmology, as well as involvement with the STEM Education Coalition and Science Debate 2008. From my involvement in the Physics Instructional Resource Association (PIRA), and several area committees, I know that our committees and associated groups can have significant and positive impact, as well, on science education beyond our membership, and on public perception of science. As the four-year college representative, I will encourage and support continued AAPT activities that have a positive impact on all educators and society as a whole. I will also strive to increase our membership, insure that our national meetings provide forums of the highest quality, and investigate ways AAPT can adapt to changes in information technology to best serve physics educators at all levels.

Treasurer



Paul W. Zitzewitz

Department of Natural Sciences, University of Michigan-Dearborn, Dearborn, MI 48128 pwz@umich.edu

Education: A.B. Carleton College, 1964, Physics *magna cum laude*; A.M. Harvard University, 1965; Ph.D. Harvard University, 1970.

Professional Experience: University of Western Ontario, Post-doctoral fellow, 1970-1972; Corning Glass Works, Senior Research Scientist, 1972-1973; University of Michigan-

Dearborn: Assistant Professor of Physics (1973-1978); Associate Professor of Physics (1978-1984); Professor of Physics (1984-2009); Professor of Science Education (2005-2009); Professor of Physics and Science Education Emeritus (2009 --)

Honors: Woodrow Wilson Foundation Fellow, 1964-1965; Danforth Foundation Fellow, 1964-1970; Alexander von Humboldt Foundation Fellow, 1989-1990; University of Michigan-Dearborn: Distinguished Faculty Research Award, 1985, Distinguished Service Award, 2005, Distinguished Teaching Award, 2007; Michigan Section, AAPT, Distinguished Service Award, 2001; American Physical Society Fellow, 2002.

Memberships: American Association of Physics Teachers; American Physical Society; National Science Teachers Association; Sigma Xi; Phi Beta Kappa; Michigan Section AAPT; Detroit Metropolitan Area Physics Teachers.

AAPT/APS Activities: Michigan Section, AAPT, Executive chain 1994-2000; President 1996-97; Physics in Pre-High School Area Committee, member 2003-2007, chair 2005-2007; PTRA, co-author "Teaching about Lightwave Communications" and presenter 1993; AAPT Treasurer and member of Executive Board, 2008-2010; American Physical Society: Forum on Education member, Executive Chain 1996-2000, Chair 1998-1999; Committee on Education, 1998-1999; Committee on Informing the Public (AAPT representative) 2007-2008.

Commentary: The "Great Recession" has had a major role in making this past year one of the most financially challenging for the AAPT in decades. In addition to losses in our long-term reserves (managed for us by TIAA-CREF), the organization has invested in a number of initiatives to better achieve our goal "to enhance the understanding and appreciation of physics through teaching." Some have succeeded, others need some "tweaking," others have been cancelled. One role of the treasurer is to communicate the status of the long-term reserves to the Executive Board and to communicate closely with our TIAA-CREF financial advisor. A second role is to work closely with the Executive Officer and Chief Financial Officer on the operating budget and to keep the Board closely involved with these discussions. The Board and the Executive Office are now working together very well on controlling expenditures and investigating the feasibility of enhancing revenue. If re-elected I look forward to two more years of working to maintain and improve the cooperation among the Board, the Office, and TIAA-CREF in achieving the financial goals of AAPT.