

2006 PMFC Election Candidates

Vice Chair (two candidates)

- [John Gillaspy](#)
- [Steve K. Lamoreaux](#)

Executive Committee Member-at-Large (four candidates)

- [Eric Burt](#)
 - [M. Scott Dewey](#)
 - [David Kawall](#)
 - [Chen-Yu Liu](#)
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Vice Chair

John Gillaspy (Vice Chair Candidate)

Positions: NIST Group Leader, 1999-present; NIST Project Leader, 1991-1999; NRC NIST Research Associate, 1988-1991; PhD, Harvard, 1988; BS Stanford, 1982; Hewlett-Packard Research Labs, 1981; Stanford Linear Accelerator Center, 1980.

Main Research Interests: Ion traps (current focus on electron beam ion traps and highly charged ions); precision spectroscopy (laser, Bragg, microcalorimeter); tests of QED in few-electron atoms and ions; interdisciplinary research combining atomic physics with other fields such as microlithography, nanotechnology, x-ray astronomy, and biomedicine; tests of fundamental symmetries and the symmetrization postulate of quantum mechanics; cold atom collisions and Bose-Einstein condensation.

Other Activities and Awards: Fellow of the APS (DAMOP, 2005); Distinguished Visiting Fellow (Queens University Belfast, 2003); Bronze Medal Award (U.S. Department of Commerce, 1999); Worldwide Young Scientist Award (Sigma Xi, 1998); NIST-wide Young Investigator Award (Sigma Xi, 1997); Competence Award (NIST, 1994); Chair, APS Topical Conference on Atomic Processes in Plasmas (2004-2007); Chair, Fundamental Data Task Force (International SEMATECH, 2002-2004); Co-Chair (with Intel), 1st International EUV Source Modeling Workshop (2003); Interagency Working Group on High Energy Density Physics for the National Science and Technology Council, Office of Science and Technology Policy (2003); University of Maryland Chemical Physics Graduate Program; NSF REU (Research Experiences for Undergraduates) student advisor; NIH and NIST NRC Postdoctoral Advisor; Member of the APS (DAMOP, DLS, GPMFC, FIAP, FEd), Sigma Xi, and AAAS.

Steve K. Lamoreaux (Vice Chair Candidate)

Positions: Current Employer: Los Alamos National Laboratory Position: Laboratory Fellow, Team Leader of the Dynamic Materials/Weapons Physics Team

Main Research interests: My current research interests are in the application of precision measurements to both fundamental and practical problems. The fundamental problems include measurement of the neutron electric dipole moment with ultracold neutrons, the electron electric dipole moment using SQUID magnetometry, and the Casimir force using precision torsion pendulums. Practical problems include the development of measurements supporting science-based stockpile stewardship, which require precision techniques to determine the dynamical properties of highly shocked materials.

Other Activities: I have previously served as a GPMFC member-at-large.

Executive Committee

Eric Burt (Executive Committee Member-at-Large candidate)

Positions: Senior Member Technical Staff, Jet Propulsion Laboratory (2001-present); Physicist, US Naval Observatory (1997-2001); Postdoctoral Associate, JILA (1995-1997); Ph.D., University of Washington (1995).

Main Research Interests: The development of new types of precise trapped atom/ion frequency standards for time-keeping and tests of fundamental physics (Lorentz invariance and variation of fundamental constants.) Laser-cooled atomic fountain clocks. Coherence and collisional properties of Bose-Einstein condensates and Fermi-degeneracy in radioactive isotopes. Laser-cooling and trapping of single ions.

Other Activities and Awards: Member APS (DAMOP, TG/PMFC); member IEEE; member of the technical program committee for the IEEE Frequency Control Symposium (1999-present); JPL Group Achievement Award (2004); BEC research collaboration at LANL; served on LANL alpha-dot experiment external review board (2005).

M. Scott Dewey (Executive Committee Member-at-Large candidate)

Positions: Physicist (1986-present) Ionizing Radiation Division, NIST; Research associate, Princeton University (1984-1986); PhD, Princeton University, 1984.

Main Research Interests: Tests of the Standard Model via precise measurements of neutron beta-decay parameters; recalibration of the national neutron source NBS-1; tests of special relativity via precise wavelength measurements of neutron capture gamma-rays realized using perfect crystal silicon.

Other Activities/Awards: Member APS GPMFC, DAMOP, DNP

David Kawall (Executive Committee Member-at-Large candidate)

Positions: Assistant Professor, University of Massachusetts at Amherst (2005-Present); RIKEN Fellow, Brookhaven National Laboratory (2004-Present); Associate Research Scientist, Yale University (1995-2004); Ph.D., Stanford (1996)

Main Research Interests: Tests of fundamental symmetries (time reversal, CPT); precision measurements of atomic and molecular structure; precision measurements of fundamental constants

Other Activities and Awards: Member of APS (DAMOP, DNP), RIKEN Fellow (2004-Present)

Chen-Yu Liu (Executive Committee Member-at-Large candidate)

Positions: Assistant Professor, Indiana University (2005-present); Postdoctoral Fellow, Los Alamos National Laboratory (2002-2005); PhD, Princeton University (2002)

Main Research Interests: Tests of fundamental symmetries at low energies: Time reversal symmetry violation via a search for the electric dipole moment of the electron using a solid state system; Local Lorentz invariance using a paramagnetic sample and a SQUID magnetometer. Ultracold neutron physics: intense UCN source development, search for the electric dipole moment of the neutron using UCN.

Other Activities and Awards: Member APS (DNP, TG/PMFC); Louis Rosen Prize for outstanding doctoral dissertation (2003), LASNCE, Los Alamos, Director's Funded Post-doctoral Fellow, Los Alamos National Laboratory.