

## **2003 PMFC Election Candidates**

### **Vice Chair**

- [John Gillaspy](#)
- [Carol E. Tanner](#)

### **Executive Committee At-large**

- [Robert W. Dunford](#)
- [Harvey Gould](#)
- [Protik K. Majumder](#)
- [Paul Vetter](#)

### **Vice Chair**

#### **John Gillaspy**

##### **Positions:**

Group Leader, NIST, 1999-present; Staff Physicist, NIST, 1988-1999; PhD, Harvard, 1988, BS Stanford, 1982.

##### **Main Research Interests:**

High precision spectroscopy of neutral atoms and trapped highly charged ions (laser spectroscopy, visible, UV, EUV, and X-ray spectroscopy); tests of QED in few-electron systems; interdisciplinary research combining atomic physics with microlithography, nanotechnology and laboratory astrophysics; test of the symmetrization postulate of quantum mechanics; spin-polarized atomic hydrogen (thesis).

##### **Other Activities and Awards:**

Chair, Fundamental Data Working Group (International SEMATECH, 2003); Distinguished Visiting Fellowship (Queens University, Belfast, 2001); Bronze Medal Award (U.S. Department of Commerce, 1999);

Young Scientist Award (Sigma Xi, worldwide, 1998); Young Investigator Award (Sigma Xi, NIST-wide, 1997);

Competence Award (NIST, 1994); National Research Council Associateship (NIST, 1988-1991); Member APS (GFC FIAP DAMOP DLS FHP FED), Sigma Xi, AAAS.

#### **Carol E. Tanner**

##### **Positions:**

Associate Professor, Univ of Notre Dame 1996-present; Visiting Professor, JILA 2002-present; Visiting Scientist, NIST-Boulder 2001-02; Claire Boothe Luce Assistant Professor, Univ of Notre Dame 1990-95; NRC Post-Doct, NIST-Gaithersburg 1988-90; Post-Doct, JILA 1985-88; PhD, Univ of California-Berkeley 1980-85; Research Intern, Xerox PARC 1981; Research Associate, Bell Labs-MurrayHill, 1980.

##### **Main Research Interests:**

Precision measurements of atomic lifetimes, transition strengths, energy levels, and transition

wavelengths that test atomic and nuclear structure. Precision laser spectroscopy. Atomic parity non-conservation, and tests of fundamental constants and symmetries.

**Other Activities and Awards:**

Member APS, DAMOP, DLS, TG/PMFC; DLS Executive Committee 2002-present; DAMOP Executive Committee 1998-2001; DAMOP Thesis Prize Committee 1996-98; Fellowship Committee TG/PMFC 1996-97; Committee on Educational Activities TG/PMFC 1995-97; Executive Committee TG/PMFC 1994-97; APS Fellowship 2002; Kaneb Teaching Award Univ of Notre Dame 2001; NIST Precision Measurements Grant 1992-95.

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***Executive Committee At Large***

**Robert W. Dunford**

**Positions:**

Physicist, Argonne National Laboratory (1986-present); Assistant Professor, Princeton University (1980-1986), Instructor, Princeton University (1978-1980); Ph.D., University of Michigan (1978).

**Main Research Interests:**

Spectroscopy of highly charged ions, forbidden transitions, two-photon decay, tests of relativistic quantum mechanics and quantum electrodynamics, atomic parity nonconservation, interface between atomic and nuclear physics.

**Other Activities and Awards:**

Member AAAS, DAMOP, APS-TG/PMFC (Executive Committee 1992-1995), helped organize two APS symposia and six conferences/workshops, co-editor of four conference proceedings. Horace Rackham Predoctoral Fellow, University of Michigan, 1977, NIST Precision Measurement Grant, 1983-1985, Exceptional Performance Award, Argonne National Laboratory, 1991.

**Harvey Gould**

**Positions:**

Lawrence Berkeley National Laboratory (LBNL) Staff Senior Physicist (1988 - present); LBNL Staff (1978-1988); LBNL Post Doc. (1971 -1978); Ph.D. Brandeis Univ. 1970.

**Main Research Interests:**

Electron electric dipole moment experiments, precision polarizability measurements with cold atoms, molecular synchrotrons and cold molecules, tests of QED and precision measurements using accelerators, trapping and cooling radioactive atoms.

**Other Activities and Awards:**

Secretary - Treasurer TG/PMFC (1995-1998); Publications Committee Chair, DAMOP (1993-1994); Program Committee, DAMOP (1983-1986); Program Advisory Committees: GSI SIS-18/ESR Accelerator, Germany (1986-1988); Hollifield Heavy Ion Accelerator, Oak Ridge (1985-1987); Technical Advisory Committee, LBL Bevalac (1986, 1988); Users Executive Committee, LBL Super-HILAC (1984-1985); NIST Precision Measurements Grant (2002 - ); Senior Visiting Fellow, Oxford University, 1982; Fellow, APS, AAAS.

## **Protik K. Majumder**

### **Positions:**

Dept. Chair (2003), Associate Prof. of Physics (2000-present), and Asst. Prof. of Physics (1994-2000) Williams College; Research Asst. Prof., Univ. of Washington (1993-94); Postdoctoral Assoc., Univ. of Washington (1989-1993, with E.N. Fortson); Ph.D., Harvard University (1989, advisor: F.M. Pipkin).

### **Main Research Interests:**

Tests of fundamental physics using atoms. Precision measurements of atomic structure in thallium and other heavy atoms using diode lasers, vapor cells, and atomic beams. Atomic measurements of parity nonconservation. Search for other symmetry-violating forces in atoms.

### **Other Activities and Awards:**

NIST Precision Measurement Grant 1999-2002. NSF/RUI support 1998-present. Senior thesis supervisor for S.C. Doret, 2002 APS Apker Award Winner. Member APS/DAMOP, PMGCTG, AAPT.

## **Paul Vetter**

### **Positions:**

Visiting Postdoctoral Research Fellow, Nuclear Science Division, Lawrence Berkeley National Laboratory, (1995-1998); Physicist/Staff Scientist, Nuclear Science Division, LBNL (1998-present); Ph.D., University of Washington, Seattle (1995)

### **Main Research Interests:**

Experimental tests of the electroweak standard model at low energies: atomic parity violation, nuclear beta decay. Precise measurements of beta decay correlations to search for new Weak physics. High precision measurements on superallowed beta decay (lifetimes and branching ratios) for the first row unitarity test of the CKM matrix. Tests of QED and discrete symmetries in positronium. Intersection of atomic and nuclear experimental techniques.

### **Other Activities/Awards:**

APS DAMOP Thesis Prize, 1997 Member, APS DAMOP, APS DNP, APS TG/PMFC LBNL Outstanding Performance Award, February 2000