

Precision Measurement and Fundamental Constants

NEWSLETTER

A Topical Group of The American Physical Society
<http://www.aps.org/units/pmfc>

No. 25 May 2003

2003 APS April Meeting in Philadelphia, April 5-8.

Our annual meeting was held in conjunction with the APS April meeting in Philadelphia, April 5-8. Our group co-sponsored two sessions. The focus session on "Phenomenology of Quantum Gravity," was organized by Ron Walsworth and chaired by Ted Jacobsen. The talk:

"Prospects for Lorentz and CPT Violation,"
Alan Kostelecky (Indiana University)

began the session and was followed by several shorter invited contributions. The invited session on "Precision Measurements for Industry" was organized by Jim Faller and chaired by Katharine Gebbie. The titles and speakers were:

"Ultrafast measurements of optoelectronic device physics," Steven Cundiff (JILA/NIST and Univ. Colorado),

2003 Election Results

The results for the 2003 election are as follows: Carol Tanner is elected to Vice-Chair, while Harvey Gould and Protik K. Majumder are elected to begin their terms as executive committee Members-at-Large. Terms begin with the end of this year's Annual Meeting at Philadelphia.

We thank the nominating committee of Ron Walsworth (Chair), Eric Burt and Linda Young.

"Superconducting Transition Edge Sensors,"
Blas Cabrera (Department of Physics, Stanford University),

"Precision Measurement of Low-Level Radioactivity in Environmental and Forensic Samples," Leticia Pibida (National Institute of Standards and Technology),

"National Needs for Appearance Metrology,"
Maria E. Nadal (National Institute of Standards and Technology)

"The Measurement of Optical Nonlinearities in Telecommunication Fibers - A New Approach Anthony M. Johnson (Physics Department, New Jersey Institute of Technology).

APS Fellows

The fellowship committee of GPMFC is chaired by our group's Vice-Chair. Each year the fellowship committee reviews and forwards the nominations of candidates whose work has significantly impacted the field of precision measurement and fundamental constants. Follow the fellowship links on the APS web site for procedures if you wish to nominate a candidate. This year, congratulations to our new APS Fellow:

Carol Elizabeth Tanner (University of Notre Dame), "For her contributions to the understanding of atomic structure through precision measurements of atomic lifetimes and transition amplitudes."

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2003 Frances M. Pipkin Award to Eric A. Hessels

Congratulations to 2003 Frances M. Pipkin Awardee Eric A. Hessels of York University. His citation reads: "For a wide range of high precision measurements to test fundamental interactions in atomic physics, especially fine structure splittings in helium as a measure of the fine structure constant, and for an innovative experimental technique to create atoms of antihydrogen."

Travel Support for Young Scientists

Each year, the Topical Group provides partial travel support to several graduate students, post-docs, and recently graduated physicists to present contributed papers in the area of precision measurement and fundamental constants. In 2003, five awards were given to students presenting both at the annual meeting in Philadelphia and at DAMOP. Check the group web site for details (http://www.aps.org/units/pmfc_educ_at.html).

Electronic Newsletters

At the 2002 annual executive and business meetings it was discussed and decided that our group newsletters would be posted, on a trial basis, on the Web (pdf and html format), and not sent out in hard copy. The annual savings would then be used to fund student travel grants. The executive committee welcomes feedback on this approach.

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