



The American Physical Society

Topical Group on Precision Measurement and Fundamental Constants

Newsletter No. 38

June 2012

Fred E. Wietfeldt, Tulane University
Secretary/Treasurer, GPMFC

Topical Group Annual Meeting

The 2012 annual, business, and executive committee meetings of the Topical Group were held during the DAMOP meeting in Anaheim, CA, June 5–8, 2012. GPMFC co-sponsored two invited sessions. The first, "The Fine Structure Constant", featured talks by Saida Guellati (CNAM), Shannon Hoogerheide (Harvard), Makiko Nio (RIKEN), and Shau-Yu Lan (Berkeley). The second, "Precision Measurements and Applications to Fundamental Physics" welcomed talks by Mark Kasevich (Stanford), Chris Oates (NIST), Michael Martin (JILA), and Markus Aspelmeyer (Vienna). Judging by the standing room only crowds these were easily the most popular invited sessions of the conference. Thanks to our organizing committee, Jun Ye and Holger Müller, for making this happen.

The 2013 annual meeting of the Topical Group will coincide with the 2013 APS April meeting in Denver.

2012 Election Results

Thanks to the Nominating Committee for generating an excellent slate of candidates for the GPMFC 2012 election, and to the candidates for their willingness to serve the Topical Group. The newly elected members of the Executive Committee are:

Vice-Chair: Dmitry Budker, U.C. Berkeley
Member-at-Large: Eric Hudson, UCLA
Member-at-Large: Tanya Zelevinsky, Columbia

The Vice-Chair rises to Chair-Elect next year, and Chair the following year. Members-at-Large serve for staggered three-year terms. The new term began on June 9, at the conclusion of the annual meeting. This year 39.1% of the Topical Group membership voted, which is good, but we strive for 100% participation. Please be sure to cast your vote in next year's election!

Student Travel Support

The Topical Group supports students to travel to our annual meeting and present research findings. Members who supervise and mentor are reminded to share this information with their students. We cannot cover all travel expenses, but we can defray most costs, up to a maximum of \$600 per student. For more information and application instructions, go to: <http://www.aps.org/units/gpmfc/meetings/travel.cfm>

Future Programs

One of the main goals of the Topical Group is to present interesting and engaging programs that reflect both the diversity of interests of our membership and the common themes of precision measurement. Our program committee seeks topics for next year's meetings, and your suggestions are welcome, particularly in interdisciplinary, cross cutting, or new areas. GPMFC plans to co-sponsor sessions next year at both the DAMOP and April APS meetings. Members with ideas for future program topics should contact the Program Committee Chair Stuart Freedman (sjfreedman@lbl.gov).

APS Meetings Childcare Program

The APS Committee on the Status of Women in Physics (CSWP) has small grants up to \$400 available for meeting attendees who are bringing small children to a meeting or who incur extra expenses in leaving their children at home (i.e., extra daycare or babysitting services). GPMFC will participate in this program beginning with the 2013 annual meeting in Denver.

2013 Francis M. Pipkin Award

The Francis M. Pipkin Award honors research accomplishments by a young scientist in the interdisciplinary area of precision measurement and fundamental constants. Scientists who have held the Ph.D. degree for not more than 15 years prior to the nomination deadline are eligible for the award. The award recipient will be selected on the basis of outstanding work in the area of precision measurement and fundamental constants, as represented by his or her publications and three nominating letters. Please consider nominating a worthy colleague. **The deadline for nominations is August 1, 2012.** Nominating instructions can be found here: <http://www.aps.org/programs/honors/awards/pipkin.cfm>.

The American Physical Society Strategic Plan

In April the APS unveiled a Strategic Plan for 2013 through 2017. The planning process, involving extensive Executive Board and APS staff discussions, was started in 2011 by the Operating Officers and the Presidential Line, as a way to develop a roadmap for the Society over the next five years. To better serve the physics community as a whole, the plan outlines goals to make the physics community thrive. First and foremost, the APS aims to keep its journals and meetings as prime sources of cutting-edge physics research. In addition, the APS will continue to advocate for physics to policy makers, and continue to promote physics education at all levels. In order to serve society as a whole, APS aims to be the leading source of information about physics, and to build support for science amongst the public. While the plan outlines strategic goals and objectives, implementation ideas will be developed through discussions between the Executive Board and APS staff and the work of various task forces and committees, and informed by suggestions from unit leadership and APS members. A .pdf copy of the Strategic Plan can be obtained here: <http://www.aps.org/about/strategy/index.cfm>. APS has also provided a website where members can comment on implementation ideas: <http://www.aps.org/about/strategy/comments/index.cfm>.

Physics Departmental and Teaching Resources

At the Unit Convocation this year APS highlighted departmental and teaching resources that members may find useful:

comPADRE (<http://www.compadre.org/>) is a network of free online resource collections supporting faculty, students, and teachers in physics and astronomy education. It contains simulations, animations, and images illustrating physical systems and processes; content support for physics teachers; student tutorials, activities, and labs; and much more.

Insight (<http://www.aps.org/careers/insight/>) is a series of slide shows designed to inform and excite undergraduates about physics, suitable to be shown in venues frequented by potential physics majors such as university science buildings.

Upcoming Conferences and Meetings of Interest

2012 AAPT Summer Meeting

<http://www.aapt.org/Conferences/sm2012/>

July 28-August 1, 2012

University of Pennsylvania

Philadelphia, PA

International Conference on Spontaneous Coherence in Excitonic Systems

<http://icsce6.stanford.edu/index.html>

August 27-31, 2012

Stanford University

Stanford, CA

Eighth International Conference on Atomic and Molecular Data and Their Applications

<http://physics.nist.gov/Icamdata/index.php>

September 30-October 4, 2012

NIST

Gaithersburg, MD

International Workshop on Quantum Noise and Measurement in Engineered Electronic Systems

<http://www.pks.mpg.de/~qnm12/>

October 8-12, 2012

Max-Planck-Institut für Physik komplexer Systeme

Dresden, Germany

Laser Science XXVIII

<http://www.frontiersinoptics.com/>

October 14-18, 2012

Rochester Riverside Convention Center

Rochester, NY

Conference on Coherent Raman Scattering Microscopy

October 14-16, 2012

<http://www.pi3.uni-stuttgart.de/microCARS2012/>

Wilhelm-Kempf-Haus

Naurod, Germany

2012 Fall Meeting of the APS Division of Nuclear Physics

October 24-27, 2012

<http://physics.ucr.edu/dnp2012/>

Hyatt Regency

Newport Beach, CA

2012-2013 GPMFC Executive Committee (year term ends in parentheses)

Chair:

Stuart Freedman (2013)
University of California, Berkeley
sjfreedman@lbl.gov

Member-at-Large:

Mark Raizen (2013)
University of Texas, Austin
raizen@physics.utexas.edu

Chair Elect:

Michael Romalis (2013)
Princeton University
romalis@princeton.edu

Member-at-Large:

Bill Marciano (2014)
Brookhaven National Laboratory
marciano@bnl.gov

Vice Chair:

Dmitry Budker (2013)
Princeton University
budker@berkeley.edu

Member-at-Large:

Holger Müller (2014)
University of California, Berkeley
hm@berkeley.edu

Past Chair:

Jun Ye (2013)
NIST/ University of Colorado-JILA
junye@jilau1.colorado.edu

Member-at-Large:

Eric Hudson (2015)
UCLA
eric.hudson@ucla.edu

Secretary/Treasurer:

Fred Wietfeldt (2013)
Tulane University
few@tulane.edu

Member-at-Large:

Tanya Zelevinsky (2015)
Columbia University
tz@phys.columbia.edu

Member-at-Large:

Chen-Yu Liu (2013)
Indiana University, Bloomington
cl21@indiana.edu