

# NEWSLETTER

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

No. 25 March 2001

## 2001 Annual Meeting in Washington, D. C. April 28-May 1

The Annual Meeting of the Topical Group will be held in conjunction with the April Meeting of the APS at the Renaissance Hotel in Washington, D. C. For more information on the meeting, check the APS Meetings website at <http://www.aps.org/meet/apr01/>.

Sessions sponsored or co-sponsored by the Topical Group are:

### Saturday, April 28, 14:30.

**Session C9** *Tests of Physics Laws. (Contributed session) Room 2, Renaissance Hotel.*

Chair: Peter Mohr.

Annual Meeting Deadlines:	
Abstracts:	12 January
Early registration:	16 February
Postdeadline Abstracts:	9 March
Satellite Meeting Request:	20 March
Late registration:	30 March
Housing:	30 March

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### Sunday, April 29, 14:30.

**Session J9** *(Joint with Topical Group on Gravitation) Experimental Gravity and Gravitational Radiation. (1 invited, 12 contributed talks)*

Room2, Renaissance Hotel.

Chair: Clifford Will.

#### Invited talk:

14:30 Jens H. Gundlach *(University of Washington)*  
Precision Measurement of Newton's Constant

### Monday, April 30, 10:45.

**Session Q3** *(Joint with Topical Group on Gravitation) Present Status and Future Prospects for LIGO, LISA and Gravity Probe B.*

Renaissance East, Renaissance Hotel.

Chair: Gabriela Gonzales.

#### Invited talks:

10:45 Nergis Mavalvala *(LIGO Laboratory, Caltech)*  
Status of LIGO

11:21 Peter Fritschel *(MIT)* The Second Generation Gravitational Wave Detectors

11:57 Robin Stebbins *(University of Colorado)* Mapping the Gravitational Sky Between 0.1 mHz and 1 Hz

12:33 C.W.F. Everitt *(Gravity Probe B Team)* Gravity Probe B: Countdown to Launch

### Monday, April 30, 14:30.

**Session S4** *Femtosecond Optical Frequency Comb Metrology. Renaissance West A, Renaissance Hotel.*

Chair: John Lawall.

*Continued on page 2*

## 2001 Annual Meeting in Washington, D. C., continued

### Invited talks:

14:30 John Hall (JILA, NIST/University of Colorado)  
Along the Highway to Optical Clocks: an Overview

15:06 Alan Madej (National Research Council of  
Canada, Ottawa, Canada) Harnessing the Single Ion:  
Precision Measurements across the Optical Spectrum  
using a Trapped Strontium Ion Optical Frequency  
Standard

15:42 Thomas Udem (*Max-Planck-Institut für  
Quantenoptik, Garching, Germany*) Measuring the Fre-  
quency of Light with Femtosecond Laser Pulses

16:18 Jun Ye (*JILA, NIST/University of Colorado*) Phase  
stabilized femtosecond laser combs: From optical fre-  
quency synthesizer to quantum dynamics

16:54 Harald R. Telle (*Physikalisch-Technische  
Bundesanstalt, Braunschweig, Germany*) Femtosecond  
comb metrology at PTB

17:30 Scott A. Diddams (*NIST*) Frequency measure-  
ments of cold-atom clocks

*Some other invited talks that might be of interest are*

### Saturday, April 28

**Session B6.** DNP: Properties of Hadrons and Nuclei.  
Auditorium, Renaissance Hotel

10:45 Georg Bollen (*National Superconducting Cyclo-  
tron Laboratory / Michigan State University*) New mass  
determinations using a Penning trap

### Sunday, April 29

**Session H6.** FHP/DAMOP: 100 Years at NBS-NIST.  
Auditorium, Renaissance Hotel

11:57 Edwin Williams (*NIST*) A Century of Fundamen-  
tal Constants Work at NBS-NIST

### Monday, April 30

**Session Q13.** DNP: Mini-Symposium: Ultracold Neu-  
trons. Room 12-13, Renaissance Hotel

10:45 Steve Lamoreaux (*Los Alamos National Labora-  
tory-Physics Division*) The Physics of Ultracold Neu-  
trons and their Production

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## 2001 Pipkin Award Goes to Jens Gundlach

The Francis M. Pipkin Award was established by the Topical Group on Precision Measurement and Fundamental Constants to honor exceptional research accomplishments by a young scientist in the interdisciplinary area of precision measurement and fundamental constants and to encourage the wide dissemination of the results of that research. The award is given biennially every odd-number year and consists of \$2,000 plus support of travel expenses to the APS Meeting at which the award is conferred.

The winner of the 2001 Pipkin Award is Jens Gundlach of the University of Washington.

Citation:

*“For identifying, and providing a solution to, an unrecognized weakness in the Cavendish technique for measuring the gravitational constant  $G$ ; improving the accuracy of  $G$  by an order of magnitude, representing one of the largest incremental increases in accuracy ever obtained in the history of such measurements.”*

**Gundlach will speak at 14:30, Sunday, April 29, at the beginning of Session J9**

Experimental Gravity and Gravitational Radiation.  
**Room 2, Renaissance Hotel.**



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