

DIVISION OF ATOMIC, MOLECULAR AND OPTICAL PHYSICS NEWSLETTER

A Division of The American Physical Society

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Stephen R. Lundeen

Chair
Department of Physics
Colorado State University
Fort Collins, CO 80523

PHONE: (970) 491-6647

FAX: (970) 491-7947

E-MAIL: lundeen@lamar.co.localhost
lostate.edu

John B. Delos

Vice Chair
Physics Department
College of William and Mary
Williamsburg, VA 23187-8795

PHONE: (757) 221-3511

FAX: (757) 221-3540

E-MAIL: jbdelo@facstaff.wm.edu

Daniel J. Larson

Chair-Elect
Eberly College of Science
The Pennsylvania State University
517 Thomas Building

University Park, PA 16802

PHONE: (814) 865-9591

FAX: (814) 863-0491

E-MAIL: djlarson@psu.edu

Timothy J. Gay

Secretary/Treasurer
Behlen Laboratory of Physics
University of Nebraska
Lincoln, NE 68588-0111

PHONE: (402) 472-2773

FAX: (402) 472-2879

E-MAIL: tgay1@unl.edu

INSIDE...

- [Argentine Scholarship Available](#)
- [More News from South America!](#)
- [DAMOP Thesis Prize Nominations Due!](#)
- [NIST Precision Measurement Grants](#)
- [NSF MRI Program](#)
- [Announcement of the 2ND ICAMDATA](#)
- [Nominations for APS-DAMOP Fellowships](#)
- [DAMOP Committees for 1999-2000](#)

DAMOP 2000 UPDATE

The DAMOP 2000 meeting (the 31st annual meeting of the Division) will be held at the University of Connecticut in Storrs, Connecticut from June 14th through June 17, 2000. The deadline for receiving abstracts is Feb. 4, 2000.

On-campus conference lodging will be available in the newly constructed South Campus residences. These accommodations offer private and comfortable overnight lodging for single and double occupancies. Lower cost housing for students will also be provided. Meals will be available at the residences.

Registration and housing will be coordinated by the University of Connecticut Center for Professional Development, Extended and Continuing Education at One Bishop Circle, Storrs, CT 06269-4056

(Ms. Diane Dole at (860) 486-1072; Fax (860) 486-5521; e-mail (ddole@irismonarch.ced.uconn.edu)). Up to date information about the meeting, registration, housing, etc. can be obtained from the from the American Physical Society Web Site: www.aps.org/DAMOP/. A registration and housing form will be included in the Meeting Announcements insert of the December APS News, as well as the February DAMOP Newsletter. In addition to the regular program, an accompanying persons program is being planned. Detailed information will be provided in the next Newsletter.

Call for Papers - Special Session on Undergraduate Research at DAMOP 2000 There will be a special session featuring research performed by undergraduate students at the 2000 DAMOP meeting. The papers will be 20 minutes long including discussion. Interested students should submit an electronic abstract for their talk in standard APS format and a one page summary of their contribution to the project by January 26, 2000. From the submitted materials, a committee will select four students to be invited to give talks in the special session. Participation is limited to currently enrolled undergraduate students. The participation of women and minority undergraduate students is especially encouraged.

PLEASE NOTE EARLY ABSTRACT DEADLINE! The deadline for regular abstracts for the DAMOP meeting is February 4, 2000. The deadline for abstracts for the undergraduate session is January 26. Abstracts should be sent to:

Don Madison
Curators' Professor of Physics and
Director of the Laboratory for Atomic, Molecular and Optical
Research
University of Missouri-Rolla
Rolla, MO 65409-0640
phone: 573-341-4703
fax: 573-341-4715
e-mail: madison@umr.edu

ARGENTINE SCHOLARSHIPS AVAILABLE

An Argentine government agency scholarship (<http://www.agencia.secyt.gov.ar>) is available in the Centro Atomico Bariloche for Ph.D. thesis research on "Experimental study of multi-electron processes in molecular fragmentation under ion impact."

Contact:
Dr. Guillermo Bernardi,
bernardi@cab.cnea.gov.ar
FAX +54-2944-445299
phone +54-2944-445233

MORE NEWS FROM SOUTH AMERICA!

Pan-American Advanced Study Institute Planned for Brazil 2000

A grant has recently been awarded to the University of New Mexico to support a Pan-American Advanced Study Institute covering several AMO topics. The Institute will bring together young scientists from the Americas, at the advanced graduate and postgraduate level, to learn of new ideas and developments in atomic, molecular and optical physics. Discussions among the participants will help establish collaborations between scientists in the countries of the Americas, stimulating training, cooperation and new research. The proposed course of lectures, seminars and discussions will build on strengths of the atomic, molecular, quantum optical and, to some extent, chemical communities already doing research in Latin America, centered around the use of large research tools. In particular emphasis will be given to cooperation and collaboration between the synchrotron light sources in Campinas (Brazil) and Berkeley (California).

The Institute, planned for May 2000 in Angra Dos Reis, Brazil, will feature four areas of AMO physics, interrelated in content and technique: synchrotron radiation, studies using lasers, electron and ion beams, and quantum optics, in particular quantum computing with ion traps. The organizers are Fred Schlachter (ALS, U.C. Berkeley), Carmen Cisneros (Centro de Ciencias Fisicas, UNAM Cuernavaca, Mexico), Eduardo Montenegro (Pontificia Univ. Catholica, Rio de Janeiro), Humberto S. Brandi, (President of the Brazilian Physical Society), and Howard Bryant, (University of New Mexico).

For further information please contact:

Fred Schlachter, email: fsschlachter@lbl.gov,

or Carmen Cisneros, email: carmen@ce.ifisicam.unam.mx

DAMOP THESIS PRIZE NOMINATIONS DUE!

If you have a Ph.D. student who has done an outstanding job on his or her thesis, make sure to nominate them for the AMO Thesis Prize. Their thesis defense must have been completed by December 6, 1997; the deadline for submittal of nomination packages is fast approaching: December 6, 1999.

Nomination packages are to be mailed to the chair of the selection committee:

Dr. Eric Cornell

University of Colorado

JILA

Campus Box 440

Boulder, CO 80309-0440

Phone (303) 492-6281

Fax (303) 492-5235

Email: cornell@jila.colorado.edu.

Last years winners were Brett Esry (U. of Colorado) and Jens Noeckel (Yale).

NIST PRECISION MEASUREMENT GRANTS

Applications are being solicited for two new Precision Measurement Grants, sponsored by the National Institute of Standards and Technology (NIST), to be awarded beginning 1 October 2000 (Fiscal Year 2001). Each grant is in the amount of \$50,000 per year, renewable for up to two additional years, for a total of \$150,000. NIST sponsors these grants to encourage research by U.S. university and college faculty members in the field of precision measurement and fundamental constants and to foster contacts between NIST scientists and such faculty members actively engaged in such work. Candidates' pre-proposal summaries and biographical information must reach NIST by 1 February 2000 to be considered for the FY 2001 awards. For more information, contact:

Barry N. Taylor, Chairman
NIST Precision Measurement Grants Committee
National Institute of Standards and Technology
Building 225, Room B161
Gaithersburg, MD 20899-0001
(301)975-4220
barry.taylor@nist.gov.

NSF Major Research Instrumentation (MRI) Program

The solicitation for the National Science Foundation 2000 Major Research Instrumentation (MRI) competition is now publicly available on the NSF website <http://www.nsf.gov>. The publication number is 99-168 and can be accessed either from the NSF online document system or the OIA homepage.

The deadline for submission of proposals is January 18, 2000. Please note that this deadline is about one month earlier than last year.

FastLane submission will be required. Since changes to the FastLane submission procedure have been made, applicants should take careful note of these.

ANNOUNCEMENT OF THE 2ND INTERNATIONAL CONFERENCE ON ATOMIC AND MOLECULAR DATA AND THEIR APPLICATIONS (ICAMDATA) MARCH 26-30, 2000, KEBLE COLLEGE, OXFORD, ENGLAND

Goal of the conference:

Following the success of the first conference, held at the National Institute of Standards and Technology (NIST), Gaithersburg, USA in 1997, this second conference is intended to provide a further forum on atomic and molecular data activities and needs, encompassing data production, compilation and assessment, and database development. This meeting should also serve as a focal point for more intensive interactions between the various users and the main data producers, compilers, and database developers.

Program:

General subject areas will be the data needs of a variety of scientific and industrial communities, new large-scale data productions, benchmark data, assessment of data quality, and formats for databases. Special interest topics will include the data needs of various technological and scientific user communities in fields such as gaseous electronics, fusion research, lighting research, and astronomical applications. About 30 invited speakers will present papers; poster sessions will be held for contributed papers; and panel discussions will be held.

Conference site, accommodation, and travel:

The conference will take place in Keble College, Oxford, England, located about 56 miles northwest of London. Rooms have been reserved in the college and it is hoped that all participants will be lodged on site. London has two international airports, Heathrow and Gatwick. Luton and Stanstead airports may also be used. Heathrow airport has the easiest access to/from Oxford, because of the regular direct bus service.

Pre-Registration and Conference fee:

In order to insure your receipt of further announcements with more detailed information about the conference and the call for contributed papers, please complete the information below and e-mail to kl.bell@gub.ac.uk. The conference fee is expected to be about \$360. The conference website is: <http://www.am.gub.ac.uk/?icamdata/>.

NOMINATIONS FOR APS-DAMOP FELLOWSHIPS

The deadline for Fellowship Nominations is 15 February 2000. Information and nomination forms can be found at the APS Website. John Delos is the Chair of the Fellowship Committee this year.

NEWSLETTER INPUT

If you have any information, ideas, announcements, etc. that are of general interest to DAMOP members, please send them to me at any time. Barry Dunning e-mail: fbf@rice.edu FAX: (713) 285-5143

DAMOP COMMITTEES FOR 1999-2000

The current DAMOP committees are listed below. We are grateful to these members for their willingness to serve and for their efforts on behalf of the Division. Please feel free to give input, feedback, or information to these people. If you have an interest in serving on a committee, contact Tim Gay or the Chairman of the committee on which you would like to serve.

Executive Committee

- Steve Lundeen (Chair)
- Dan Larson (Chair Elect)
- John Delos (Vice Chair)
- Carl Wieman (Past Chair)

- Tim Gay (Sec./Treas.)
- Eric Heller (Div. Counc.)
- Hal Metcalf (Div. Counc.)
- Jim Cohen
- Linda Young
- Carol Tanner
- Randy Hulet
- Thad Walker
- Tom Resigno

Nominating Committee

- Tom Gallagher (Chair)
- Kate Kirby
- Tony Starace
- Ron Olson
- Siu Au Lee

Fellowship Committee

- John Delos (Chair)
- Larry Hunter
- Robert Gordon
- Ron Phaneuf
- Katharine Gebbie

Publications Committee

- Lew Cocke (Chair)
- Charlie Havener
- Marjatta Lyyra

Education Committee

- Thad Walker (Chair)
- Ed Pollack
- Don Madison
- Lee Collins
- John Brandenburger

Thesis Prize Committee

- Eric Cornell (Chair)
- Keith Macadam
- Deborah Watson
- Chun Lin
- Barbara Levi

Davisson-Germer Prize Committee

- King Walters (Chair)
- John Thomas
- Sheldon Datz
- Dan Kleppner

- Barry Schneider

Rabi Prize Committee

- Chris Green (Chair)
- Randy Hulet
- Lou DiMauro
- Mark Raizen
- Norah Berrah
- Allis Prize Committee
- Bill McConkey (Chair)
- Tom Resigno
- Ray Flannery
- Jon Weisheit
- Alan Gallagher
- Program Committee
- Dan Larson (Chair)
- Elizabeth McCormack
- Lene Hau
- Mark Raizen
- John Tanis
- Chris Greene
- Peter Zoller
- Pat Richard
- John Farley
- Luis Orozco
- Ennio Arimondo
- Thad Walker
- Phil Bucksbaum
- Steve Lundeen (ex-officio)
- John Delos (ex-officio)
- Tim Gay (ex-officio)

[DAMOP Homepage](#)