Welcome to the Annual March Meeting of the American Physical Society. All scientific sessions and some APS-sponsored sessions will be held at the Baltimore Convention Center (BCC). APS affiliated meetings and satellite meetings will be held at the Marriott Waterfront Hotel, headquarters hotel for the meeting. Consult the schedule of APS affiliated and satellite meetings, in this Bulletin for exact locations.

An outstanding scientific program has been planned by the March Meeting Program Committee. The five-day program consists of approximately 6,900 papers to be presented in invited, contributed, focus and poster sessions. A larger, enhanced exhibit show will complement the scientific program. Attendees are encouraged to visit with exhibitors who will be displaying the latest products, instruments and equipment, computer software, as well as science publications related to the research and application of physics.

## Participating APS Units

**Divisions:** Condensed Matter Physics (DCMP); Materials Physics (DMP); Polymer Physics (DPOLY); Chemical Physics (DCP); Biological Physics (DBP); Fluid Dynamics (DFD); Computational Physics (DCOMP); Atomic, Molecular and Optical Physics (DAMOP); Laser Science (DLS).

**Topical Groups:** Instrument and Measurement Science (GIMS); Magnetism and Its Applications (GMAG); Quantum Information, Concepts, and Computation (GQI); Shock Compression of Condensed Matter (SCCM); Statistical and Nonlinear Physics (GSNP).

**Forums:** Industrial and Applied Physics (FIAP); Physics and Society (FPS); History of Physics (FHP); International Physics (FIP); Education (FEd); Graduate Student Affairs (FGSA).

## Registration Location/ Hour

Pratt Street Lobby
Baltimore Convention Center (BCC)

The APS Registration Desk will open and close at the following times.

- **Sunday, March 12**: 1:00pm – 7:00pm
- **Monday, March 13**: 7:00am – 5:00pm
- **Tuesday, March 14**: 7:00am – 5:00pm
- **Wednesday, March 15**: 7:00am – 4:00pm
- **Thursday, March 16**: 7:30am – 3:00pm
- **Friday, March 17**: 7:30am – 10:00am

## Badge Monitoring

All attendees must register for the meeting. Attendees must wear their badges at all times. Security personnel will be checking for badges before allowing admission to the sessions. Attendees without badges will not be admitted to sessions or exhibits. If you have lost your badge, please go to the APS registration desk for a new one. We will give you one replacement badge free. After that replacement badges will be charged $10.00.

## Wireless Connection at the Convention Center

The Baltimore Convention Center has wireless internet connection available free of charge, sponsored by the American Physical Society.

## APS Job Fair

Whether you are looking for a job or recruiting, the American Physical Society Annual March Meeting Job Fair is the place to be! The Job Fair will provide job seekers and hiring managers with unsurpassed recruitment and networking opportunities. Last year, we assisted hundreds of job seekers and more than 50 employers.

### March 12 –16

**Job Fair Schedule**

- **March 12**: Employer/Job Seeker on-site pre-registration and check-in 1:00pm – 4:00pm
- **March 13**: Job Fair hours of operation 10:00am – 5:00pm
- **March 14**: Job Fair hours of operation 10:00am – 5:00pm
- **March 15**: Job Fair hours of operation 10:00am – 4:00pm
- **March 16**: Last day to view/search jobs and résumés online

Join in with hundreds of individuals specializing in the following areas:

- Computational Physics
- Insulators and Detectors
- Polymeric and Organic Materials
- Metals History and Physics
- Statistical and Nonlinear Physics
- Phase Transitions and Strongly Correlated Systems
- Artificially Structured Materials
- Surface, Interfaces and Thin Films
- Physics and Society Magnetism
Job Seekers utilize the Job Fair services to:
• Network with technical staff and human resource recruiters
• Post your résumé and search open positions
• Interview for positions

Employers utilize the Job Fair services to:
• Showcase your company with a Recruitment Booth
• Advertise open positions
• Interview qualified job seekers
• Search résumés specific to this meeting

For more information contact abrice@aip.org

APS Store
Monday – Wednesday • 9:30am – 5:00pm
Thursday • 9:30am – 1:00pm
Come browse our t-shirts, bumper stickers, and more.

APS Exhibit Show/APS Lounge
Exhibit Hall E
Monday, March 13 • 10:00am – 5:00pm
Tuesday, March 14 • 10:00am – 5:00pm
Wednesday, March 15 • 10:00am – 4:00pm

The annual exhibit show days are Monday through Wednesday. The exhibits are an important adjunct to the meeting, offering information on a wide variety of physics-related products and services. In addition, book and periodical publishers will be participating as exhibitors. The poster sessions, and food concessions will be located in the exhibit hall, as will the E-mail Pavilion. A wine and cheese reception will be held in the exhibit hall on Monday and Tuesday from 4:00pm – 5:00pm. Plan to stop by to visit the exhibits, view the posters and enjoy the refreshments. NOTE: You must wear your badge to be admitted to the exhibit hall.

APS Membership Booth
The APS Membership Booth is located near APS Registration in the Pratt Street Lobby. Membership Department staff will be on hand to answer questions about APS Membership and journal subscriptions.

E-mail Service
E-mail service will be available on Monday, Tuesday and Wednesday in the Exhibit Hall during exhibit hours only. E-mail will be available on Thursday and Friday in the Pratt Street Lobby. Email stations will be available for your use during the following hours:
Monday, March 13 • 10:00am – 5:00pm (exhibit hall)
Tuesday, March 14 • 10:00am – 5:00pm (exhibit hall)
Wednesday, March 15 • 10:00am – 4:00pm (exhibit hall)
Thursday, March 16 • 7:00am – 6:00pm (Pratt Street Lobby)
Friday, March 17 • 7:00am – 12:00noon (Pratt Street Lobby)

Please be advised that e-mail access is provided as a service to attendees, and that we cannot provide unlimited access to e-mail stations, both in terms of the number of stations provided and the length of time that they are available.

Speaker-Ready Room
BCC/Room 330
The speaker-ready room will be open as follows:
Sunday, March 12 • 1:00pm – 7:00pm
Monday, March 13 • 7:00am – 5:00pm
Tuesday, March 14 • 7:00am – 5:00pm
Wednesday, March 15 • 7:00am – 5:00pm
Thursday, March 16 • 7:00am – 5:00pm
Friday, March 17 • 7:00am – 12:00noon

Press Room
Press Room: BCC/Room 334
News Conference Room: BCC/Room 333
Monday through Thursday • 8:00am – 5:00pm
Friday • 8:00am – 12:00noon
Phone: 410–649–6498
Fax: 410–649–6494

Press Conference Room
BCC/Room 333
A schedule of news conferences can be obtained from the Press Room (Room 334).

City Information Desk
The Baltimore Convention and Visitors Bureau will host an information desk in the BCC/Pratt Street Lobby:
Sunday, March 12 • 2:00pm – 6:00pm
Monday, March 13 • 11:00am – 5:00pm
Tuesday, March 14 • 11:00am – 5:00pm
Stop by to inquire about restaurants in the city and sightseeing.

Business Center
The Baltimore Convention Center business center is located off the Pratt Street Lobby across from Room 333. The business center offers a full range of services and is open Monday through Friday 8:30am – 4:30pm.

Hotel List - March Meeting
• Marriott Waterfront Hotel (HQ)
  700 Aliceanna Street
  Bussing provided to and from Convention Center
• Sheraton Inner Harbor
  300 South Charles Street
  Within walking distance
• Days Inn
  100 Hopkins Place
  Within walking distance
• Renaissance Harborplace Hotel
  202 East Pratt Street
  Within walking distance
• Hyatt Regency Baltimore
  300 Light Street
  Connected to Center
• Holiday Inn
  301 West Lombard Street
  Within walking distance
• Wyndham Inner Harbor
  101 West Fayette Street
  Within walking distance
DPOLY Short Course – Baltimore Convention Center (BCC)
Polymers in Existing and Emerging Patterning Technologies (no on-site registration – you must be pre-registered to attend this course)
Room 304
Saturday March 11 • 8:30am – 5:00pm
Sunday March 12 • 8:30am – 3:00pm

Tutorials – Baltimore Convention Center (BCC)
(No on-site registration – you must be pre-registered to attend a tutorial)
Sunday, March 12
Baltimore Convention Center
Morning Tutorials #1–4
8:30am –12:30pm
T1 Spintronics: What’s New – Room 307
T2 Molecular Magnetics – Room 301
T3 Current Interpretations of Quantum Mechanics – Room 302
T4 Thermoelectric Energy Conversion – Room 303

Afternoon Tutorials #5–8
1:30pm – 5:30pm
T5 Solid State Implementations of Cavity QED – Room 301
T6 Spallation Neutron Sources – Room 302
T7 Forefront Methods and Limits of Lithography – Room 303
T8 Polymeric Templating – Room 305

Professional Skills Development for Women Physicists
Sunday, March 12
8:00am – 5:00pm
Reception 5:00pm – 6:30pm
Marriott Waterfront Hotel/Dover A (workshop)
Marriott Waterfront Hotel/Grand Salon I (reception)
This one-day workshop will offer training on persuasive negotiation and communication skills for tenure track and newly-tenured women physicists. Workshop will be led by professional facilitators using an interactive format that encourages highly personal learning. Lunch will be provided and a reception for participants will follow the workshop. Limited to 30 participants. Pre-registration required.

Workshop on Opportunities in Biology for Physicists
Organized by APS Division of Biological Physics
Sunday, March 12
8:00am – 5:00pm
Lunch break on your own.
BCC/Room 310
Biology is a rapidly changing field that has been making tremendous strides forward in recent years. Biology is changing from a descriptive to a quantitative and conceptually profound field. This workshop will showcase a sample of the rich opportunities in biology for physicists. It is aimed at physicists, especially graduate students and postdocs, who are curious about how a background in physics can provide a unique perspective of biological systems. We believe that physicists will make a substantial contribution to this revolution by working together with biologists.

Invited speakers include:
• William Bialek (Princeton)
• Steven Block (Stanford) (tentative)
• Robijn Bruinsma (UCLA)
• Hans Frauenfelder (Los Alamos)
• Klaus Lehnertz (Bonn)
• Yale Goldman (Penn)
• Boris Shraiman (Santa Barbara) (tentative)
• Charles Stevens (Salk Institute)
• Zuzanna Siwy (Irvine)
• Sunney Xie (Harvard)
Co-chairs of Organizing Committee:
Dean Astumian, DBP Vice Chair, astumian@maine.edu
Clare Yu, cyu@uci.edu

Special Workshop: Quantum Mechanics with Interactive Computer-based Tutorials
Sponsored by the APS Forum on Education
Sunday, March 12
1:30pm – 5:30pm
BCC/Room 306
• No cost to attend the workshop - all are welcome.
Although quantum mechanics is one of the most widely taught topics on the college/university level in the physical sciences, the teaching of quantum mechanics has not changed significantly since the 1940s. This workshop will present recently developed computer-based curricular material that has shown to improve understanding of traditional quantum topics and that makes many heretofore inaccessible topics in quantum mechanics accessible to undergraduate and graduate students. Participants will receive a CD containing curricular material from the Quantum Interactive Learning Tutorials (QUILT) project as well as a collection of ready to run Java programs from the Open Source Physics (OSP) project. All programs are freely distributable under the GNU GPL license.
This workshop will benefit anyone teaching or planning to teach quantum mechanics as well as computational physicists wishing to adopt the OSP Java libraries for their own teaching and research. We will discuss the general pedagogical and technical issues in the design of interactive computer-based tutorials as well as how OSP programs can be adapted to your local situation. Additional information can be obtained at www.opensourcephysics.org

Speakers:
• Chandralekha Singh, University of Pittsburgh
• Wolfgang Christian, Davidson College
• Mario Belloni, Davidson College

Career Workshop
Sunday, March 12
3:00pm – 7:00pm
BCC/Room 308
Attendance is free. All are welcome.
Condensed Matter and Materials Physics In the Next Decade

M. A. Kastner, Chair, Solid State Sciences Committee of the National Research Council and Department of Physics, MIT

• The National Research Council (NRC) will soon appoint a committee to carry out a decadal study of condensed-matter and materials physics called CMMP2010. The study, which will result in an NRC report, is supported by the NSF and DOE. The committee will assess the current and future opportunities of our field. It will identify the most important fundamental scientific problems, as well as problems whose solutions are likely to help meet national or societal needs. It will also examine the current status and future needs for resources that will be necessary to solve these problems, such as small and large facilities, individual and multi-investigator research support, as well as university, national and industrial laboratories. After a brief introduction to the work done so far, under the auspices of the Solid State Sciences Committee, attendees will be invited to offer their views about issues to which the panel should pay special attention.
Contact Congress
Mon-Thurs 9:00am–6:00pm
Sponsored by DCMP and DMP
BCC/Pratt Street Lobby

Worried about the slashing of NSF, DOE and NASA funding? Concerned about the dearth of science literacy in our high-schoolers? Anxious about where the country’s security is heading? YOU can have an impact on national science policy! Come write your representatives in Congress to let them know how you feel about science issues of interest to you. The most important letters that a Member of Congress receives are the ones from his or her constituents – you elect them, and you matter. The American Physical Society feels that it is incumbent on all of us to interact with the government, to offer technical assistance where we can, and to remind our Members of Congress that scientists have much to offer the country, in areas of basic science R&D funding, education, and energy policy. We have set up computers in the entrance area where you can send a letter to your Senators and Representatives - you can use our template or write your own letter on issues that matter to you. If the state of affairs in Washington, DC, interests you, we have another way for you to get involved: the APS “Physics and Government Network,” a group of APS members who volunteer to contact their representatives in Congress a few times a year at critical junctures. PGuNet signup fliers will be available at the registration desk and at the “Contact Congress” computers. Come help make science more visible in Congress!

Awards Program
Monday, March 13
5:45pm – 6:30pm
BCC/Room 309
Prizes and awards will be bestowed on individuals for outstanding contributions to physics. Please plan on attending the Awards Program and join us in honoring these individuals. See page 13 for a list of award and prize winners. The Awards Program will be followed by the Welcome Reception at 6:45pm.

Welcome Reception
Monday, March 13
6:45pm – 8:00pm
BCC/Ballroom II
All Attendees welcome.

Special Symposium:
Emerging Emergent Phenomena (Session F50)
Monday, March 13
Sponsored by DCMP
8:00pm – 10:00pm
Marriott Waterfront Hotel, Grand Ballroom Salons V-VI

Session Chair: Leo Kadanoff, University of Chicago
Speakers:
• Edward Witten: Emergent Phenomena In Particle Physics
• Susan J. Lolle: Revisiting Mendel and the Paradox of Gene Restoration
• Albert Laszlo Barabas: Complex Networks: From the Internet to Biology
• Bernard Sadoulet: Condensed Matter Physics and the Nature of Dark Matter in the Universe

Wine and Cheese Reception
Monday and Tuesday • 4:00pm – 5:00pm
BCC/Exhibit Hall E

APS Journal Editors Panel Discussion
Tuesday, March 14
2:30pm – 3:30pm
BCC/Room 337
All are invited to a panel discussion with the Editors of the American Physical Society journals. The panel will include Editors from Physical Review Letters, Physical Review B, and Physical Review E. They will briefly discuss some current issues facing the journals such as how to express appreciation for good refereeing, possible inclusion of popular abstracts in PRL to make Letters accessible to physicists in all fields, the challenge posed by open access, etc. The Editors look forward to hearing opinions on these and other issues. They will also respond to questions and comments. The Panel Discussion will be followed by the Meet the Editors Reception.

Meet the Journal Editors of AIP and APS
Tuesday, March 14
3:30pm – 5:30pm
BCC/Camden Lobby
The Editors of the AIP and APS journals cordially invite you to join them for conversation and refreshments. Your questions, criticisms, compliments, and suggestions about the journals are welcome. We hope you will be able to join us.

Journals of the American Institute of Physics:
• Applied Physics Letters
• Chaos
• Journal of Applied Physics
• The Journal of Chemical Physics
• Journal of Mathematical Physics
• Physics of Fluids
• Physics of Plasmas
• Review of Scientific Instruments

Journals of the American Physical Society:
• Physical Review A
• Physical Review B
• Physical Review E
• Physical Review Focus
• Physical Review Letters
• Reviews of Modern Physics
**Special Symposium:**
**Intelligent Design: Its Impact and Responses to It**
**Tuesday, March 14**
7:30pm – 9:30pm
Marriott Waterfront Hotel/Grand Ballroom Salon V

Session Chair: Robert Eisenstein
Speakers:
- Jeremy Gunn, ACLU - Dover, PA Case
- Marshall Berman - Action at the Local Level
- Cory Dean, New York Times - Media Coverage
- Francis Slakey, APS Office of Public Affairs - APS Activities

**Congressional Visits during March Meeting 2006**

**Congressional Visits Office – BCC/East Pratt Show Office, Lower Level**

The APS Office of Public Affairs (OPA) is organizing Congressional visits during the 2006 APS March Meeting in Baltimore. The advantageous location of this year’s Meeting provides an exciting opportunity to have attendees from as many districts and states as possible travel down to Washington, DC to educate Congress on the importance of science research funding. The visit days are scheduled for Wednesday, March 15th and Thursday March 16th.

Carrying the message to individual offices remains one of the best means of influencing a Member of Congress. The timing of these visits is excellent since Congress will have just started its considerations of the appropriations for the next fiscal year. In addition to influencing Congress, we hope that participants see first-hand the importance of informing their elected officials about what physicists do. While our members are getting more active in this regard and more APS meeting attendees write letters at the Contact Congress computers, there is much more to do.

OPA will assist the participants in all aspects of the congressional visits from scheduling to follow up. Leading up to the meeting, OPA will contact participants to inform them of the organizational logistics of the visits and provide a means of coordination of their meetings on the Hill with other participants in their state or district. During the March Meeting, briefings will be held in Baltimore in the evenings preceding the visits to outline a common message, offer advice on how to conduct an effective meeting, and cover the logistics of a congressional visit. We will also provide materials to be left with each office that will present useful talking points and have state specific information. Shuttle bus transportation to and from the Meeting and Washington, DC will be provided for participants.

We would like you and all APS members to view Congressional visits as part of developing a relationship with an office rather than a one-time event. We would hope that you would follow up with the Congressional office at opportune times, make visits to the home offices and perhaps invite staff or Members of Congress to visit their labs. You may also become resources for a Member’s office.

For more information visit the Congressional Visits office as noted above.

**Session on Refereeing**
**Wednesday, March 15**
9:30am – 11:00am
BCC/Room 337

Editors from Physical Review Letters and the Physical Review will provide useful information and tips for referees. Following short presentations from the editors, there will be a moderated discussion where questions relevant to refereeing will be addressed. Refreshments will be served.

**Estate Planning Seminar**
**Wednesday, March 15**
1:00pm – 2:00pm
BCC/Room 301

**Special Symposium:**
**Perspectives on our Energy Future**
**Wednesday, March 15**
7:30pm – 9:00pm
Marriott Waterfront Hotel/Grand Ballroom Salon V

Session Chair: George Crabtree, Argonne National Laboratory
Speakers:
- Steven E. Koonin, Chief Scientist, BP
- Patricia Dehmer, Office of Basic Energy Sciences, DOE

**Physics Sing-a-Long/Listen-a-Long**
**Wednesday, March 15**
9:00pm – 10:00pm
Grand Salon II, Marriott Waterfront Hotel

**Changing Dynamics of Industrial Research as a Consequence of Global Trends (Session V19)**
Sponsored by APS and AIP
**Thursday, March 16**
BCC/Room 316

Session Chair: Mark Bernius, The Dow Chemical Company
Speakers:
- Alan Taub: General Motors’ R&D: Managing Innovation Globally
- Hans Stork: Not Only Texas is Flat …
- Mark Durcan: Micron R&D: Global Scope and Nano-Scale in N-Dimensions
- Abel Weinrib: Leap Ahead: Global R&D at Intel
- Thomas Feist: Sustaining Breakthrough Research in a Changing Global Environment
### Companions Breakfast
**Monday, March 13**  
8:00am – 9:30am  
Marriott Waterfront Hotel/Dover A

Companions of the attendees of the March Meeting are invited to a complimentary breakfast to meet other companions and learn about the city of Baltimore. Presentations will be made by a representative of the Baltimore Convention and Visitors Bureau. At the breakfast you will receive information about the sites and attractions in the city.

### SPS Undergraduates and Mentors Gathering
**Monday, March 13**  
1:50pm – 2:20pm  
BCC/Room 345

Undergraduates and their mentors, as well as graduate school representatives, are especially invited to hear the student presentations and mingle with the presenters during this gathering. The event is sandwiched between two exciting undergraduate research sessions - B42 and D42 in room 345. Light refreshments will be available for those attending the talks.

### CSWP/FIAP Networking Breakfast for Women in Physics
**Tuesday, March 14**  
7:30am – 9:30am  
Marriott Waterfront Hotel, Grand Ballroom Salon VII  
$20 (pre-registration only)

The Committee on the Status of Women in Physics (CSWP) and the Forum on Industrial and Applied Physics (FIAP) will host a networking breakfast for women in physics. All are welcome, both men and women. Thanks to the generosity of FIAP, the breakfast is free for physics students who pre-register. Only a limited number of walk-ins can be accepted.

### High School Physics Teachers Day
**Tuesday, March 14**  
8:00am – 2:30pm  
Marriott Waterfront Hotel, Grand Ballroom Salons II–III

In conjunction with the 2006 March Meeting, the APS Department of Education & Outreach is sponsoring a High School Physics Teachers’ Day for teachers in the Baltimore region. For more information contact Ed Lee: lee@aps.org

The day’s program includes:
- Hands-on workshops presenting innovative, classroom-ready activities
- Research talks on cutting-edge physics
- A welcoming breakfast, and a chance to network with fellow teachers
- Lunch with a physicist

### Congressional Visits Meeting
**Tuesday, March 14**  
5:00pm – 6:30pm  
BCC/Room 337

### DCMP/DMP/DCOMP Fellows & Awards Reception
**Tuesday, March 14**  
5:30pm – 7:00pm  
Marriott Waterfront Hotel/Grand Salon VI

### FIP Reception
**Tuesday, March 14**  
6:30pm – 8:00pm  
Marriott Waterfront Hotel/Dover C

### Students Lunch with the Experts
**Wednesday, March 15**  
1:00pm – 2:30pm  
BCC/Ballroom II

Students can sign up on-site to enjoy a complimentary boxed lunch while participating in an informal discussion with an expert on a topic of interest to them. Sign-up will take place beginning on Monday, March 13 at 1:00pm at the APS registration desk, and will be on a first-come, first-served basis. Attendance is limited to eight students per topic. See page 12 for list of topics and experts.

### Congressional Visits Meeting
**Wednesday, March 15**  
5:00pm – 6:30pm  
BCC/Room 311

### Status of Funding Opportunities in NSF’s Division of Materials Research
**Wednesday, March 15**  
5:00pm – 7:00pm  
BCC/Room 338

### Student Reception
**Wednesday, March 15**  
5:30pm – 6:30pm  
BCC/Ballroom II

Sponsored by the Forum on Graduate Student Affairs (FGSA)  
All students are welcome. Plan to attend and socialize with your fellows and enjoy the refreshments. The Forum on Graduate Student Affairs (FGSA) will present a short program.
APS EVENTS FOR SPECIAL GROUPS

(In chronological order)

APS Unit Business Meetings

SUNDAY, MARCH 12

GSCCM Business Meeting
3:00pm – 4:00pm
Falkland Room, Marriott Waterfront Hotel

TUESDAY, MARCH 14

5:30pm – 6:30pm

DPOLY Business Meeting
BCC/Room 315

FIAP Business Meeting
BCC/Room 312

FIP Business Meeting
Marriott Waterfront Hotel, Galena

DCP Business Meeting
BCC/302

GSNP Business Meeting
BCC/Room 336

GMAG Business Meeting
BCC/Room 320

GQI Business Meeting
BCC/Room 343

GIMS Business Meeting
BCC/Room 301

TUESDAY, MARCH 14

7:00pm–8:00pm

DCMP Business Meeting
Marriott Waterfront Hotel/Dover A

DMP Business Meeting
Marriott Waterfront Hotel/Dover B

WEDNESDAY, MARCH 15

FED Business Meeting and Reception
5:30pm – 7:00pm
Marriott Waterfront Hotel/Grand Ballroom Salon III

DCOMP Business Meeting
6:30pm – 7:30pm
Marriott Waterfront Hotel, Dover C
**Sunday, March 12**

**High Magnetic Field Laboratory Users Group**  
5:00pm – 9:00pm  
Marriott Waterfront Hotel/Grand Ballroom Salon X

**Socialize with Science - Oxford Instruments**  
7:00pm – 9:00pm  
Marriott Waterfront Hotel/Grand Salons VIII–IX

**Monday, March 13**

**Discussions and Updates on the Nanoscale Ordered Materials Diffractometer at the Spallation Neutron Source (NOMAD)**  
11:00am – 2:00pm  
Marriott Waterfront Hotel/Dover C

**Tuesday, March 14**

**Research Corporation Reception**  
5:00pm – 7:00pm  
Marriott Waterfront Hotel/Grand Ballroom Salon I

**Alumni Reunions**  
6:00pm – 8:00pm  
Marriott Waterfront Hotel  
- Cornell University, Grand Ballroom Salons IX–X  
- University of Illinois, Grand Ballroom Salons II–III  
- Michigan State University, Bristol  
- IBM, Grand Salon VIII  
- Brown University, Falkland  
- State of Florida Universities, Harborside Ballrooms AB  
- Sigma Pi Sigma, Essex B  
- Brandeis Alumni Reunion, Essex C

**Tuesday, March 14**

**Chinese Academy of Sciences Reception**  
6:00pm–8:00pm  
Marriott Waterfront Hotel/Essex A

**American Chapter of the Indian Physics Association**  
7:30pm – 9:30pm  
Marriott Waterfront Hotel/Grand Ballroom Salon IV

**Wednesday, March 15**

**RSI Editorial Board Meeting**  
12:00noon – 2:00pm  
Marriott Waterfront Hotel/Grand Salon IX

**Status of Funding Opportunities in NSF’s Division of Materials Research**  
5:00pm – 7:00pm  
BCC/Room 338

**MRFM Workshop**  
(Magnetic Resonance Force Microscopy)  
6:30pm – 10:30pm  
Marriott Waterfront Hotel/Atlantic Room
Students can sign up on-site to enjoy a complimentary box-lunch while participating in an informal discussion with an expert on a topic of interest to them. Topics are listed below. Sign-up will take place beginning on Monday, March 13 at 1:00pm at the APS registration desk, and will be on a first-come, first-served basis. Attendance is limited to eight students per topic/expert. You must show your ticket and badge at the door, and sit at the table for which you have a ticket.

Lunch topics sponsored by:

1. **DMP** Jaqueline Krim  
   **Nanotribology: Applications and Implications of Friction at the Atomic Scale**

2. **DMP** Lynn Boatner  
   Smart Nanocomposite Materials and How to Make Them

3. **DFD** Ray Goldstein  
   **Biological Physics**

4. **DFD** Wolfgang Losert  
   Complex Fluids from Sand to Cells

5. **DFD** Dave Weitz  
   Squishy Physics

6. **FPS** Francis Slokey  
   The Issue of Intelligent Design

7. **GMAG** Jeff Childress  
   Research in Magnetic Recording - Industrial and Academic Perspectives

8. **GMAG** Jim Rhyne  
   Neutron Scattering Insights into Condensed Matter Systems

9. **DCMP** Allen Goldman  
   Superconductivity

10. **DCMP** Art Ramirez  
    Frustrated Magnetism

11. **DCMP** Gwyn P. Williams  
    Careers in the National Labs: Development of the Jefferson Lab FEL

12. **DCMP** David Awschalom  
    Spin Dynamics and Spin Coherence in Condensed Matter Systems (Spintronics)

13. **DCMP** Julia Phillips  
    Sandia & Los Alamos Center for Integrated Nanotechnologies

14. **DCMP** Alan Dorsey  
    Supersolids

15. **DCMP** Garnett Bryant  
    Quantum Nano-optics and Quantum Dots

16. **DCMP** Arthur F. Hebard  
    Magnetism in Reduced Dimensions: Ultra Thin Films and Thin-Film Interfaces

17. **DCMP** Christopher Homes  
    Optical Spectroscopy of Superconductors

18. **DCMP** Richard Newrock  
    One Dimensional Conductance: Coulomb Drag and Luttinger Liquids

19. **DCMP** Eric Shirley  
    Optical Properties of Materials: From Basic Theory to Industrial Impact

20. **DCMP** Lia Krusin-Elbaum  
    Can Disorder be Useful?

21. **DCMP** David Reitze  
    Ultrafast Spectroscopy in High Magnetic Fields: Experiments at the NHMFL
2006 PRIZES AND AWARDS

Award Session (Session E5)
Monday, March 13
5:45pm – 6:45pm
BCC/309

Biological Physics Prize
Alfred G. Redfield
Brandeis University

“For his seminal contributions to the theory and technical development of nuclear magnetic resonance spectroscopy, and for pioneering applications of this technique to the study of biological molecules.”

Lars Onsager Prize
Rodney Baxter
Australian National University

“For his original and groundbreaking contributions to the field of exactly solved models in statistical mechanics, which continue to inspire profound developments in statistical physics and related fields.”

Oliver E. Buckley Prize
Noel A. Clark
University of Colorado
Robert Meyer
Brandeis University

“For groundbreaking experimental and theoretical contributions to the fundamental science and applications of liquid crystals, particularly their ferroelectric and chiral properties.”

George E. Pake Prize
Charles B. Duke
Xerox Innovation Group

“For groundbreaking theoretical contributions to the understanding of tunneling in solids, and inelastic scattering of low-energy electrons in solids, and for his outstanding contributions to Xerox Corporate Research both as an intellectual leader and research manager.”

Frank Isakson Prize
Roberto Merlin
University of Michigan

“For original contributions to spontaneous Raman and ultrafast spectroscopy of fundamental excitations in solids.”

Earle K. Plyler Prize
Mark Johnson
Yale University

“For the applications of spectroscopic methods towards the understanding of solvation on the microscopic scale, especially the solvation of protons and hydroxide anions by water.”

James C. McGroddy Prize
Hongjie Dai
Stanford University
Alex Zettl
University of California, Berkeley

“For developing novel synthesis pathways for preparing carbon and boron nitride nanotubes and for pioneering applications of these for sensing, electronics and nanomechanics.”

Polymer Prize
Ludwik Leibler
Ecole Superieure de Physique et Chimie Industrielles, Paris

“For outstanding theoretical contributions to the fundamental understanding of self-assembly of diblock copolymers and gels, and wetting.”
2006 PRIZES AND AWARDS

Aneesur Rahman Prize
David Vanderbilt
Rutgers University
“For his conceptual breakthroughs in his development of the ultrasoft pseudo-potential and the modern theory of polarization, and their impact on first-principles investigations of the properties of materials.”

Prize to a Faculty Member for Research in an Undergraduate Institution
Rainer Grobe
Illinois State University
Q. Charles Su
Illinois State University
“For their outstanding effort at creating a successful and renowned optical theory research program at Illinois State University, and for their exemplary involvement of undergraduates in this research.”

David Adler Lectureship Award
James Chelikowsky
University of Texas
“For his creative and outstanding research in computational materials physics and for his effectiveness in communicating research results through lectures and publications.”

LeRoy Apker Award
Nathaniel Craig
Harvard University
Matthew Paoletti
Bucknell University
“For tunable nonlocal spin control in a coupled quantum dot system.”
“Experimental studies of the effects of chaotic mixing on an advection-reaction-diffusion system.”

Edward A. Bouchet Award
Angel Garcia
Rensselaer Polytechnic Institute
“For his contributions to the understanding of the role of water in the dynamics and folding of proteins through computer simulations.”

John H. Dillon Medal
Kenji Urayama
Kyoto University
“For insightful experiments that probe the nature of polymer networks.”

Keithley Award
Frances Hellman
University of California, Berkeley
“In recognition of using emerging micromachining techniques to significantly extend the range of calorimetry into the realm of nano-scale science, by construction of Si based microcalorimeters capable of operating in extreme environments with unprecedented sensitivity and accuracy.”

Maria Goeppert-Mayer Award
Hui Cao
Northwestern University
“For her groundbreaking contributions to the experimental studies of coherent light generation and transport in disordered media, including her invention of microlasers based on disordered media.”

Nicholas Metropolis Award
Joseph A. Barranco
University of California, Berkeley
“For the development of computational techniques to handle 3D compact vortices in rotating shear flows, and for the application of these techniques to solve longstanding problems in the theory of planet and star formation.”

Additional Awards:
Marshak Lectureship Award: Zohra ben Lakhdar (Session D3)
Beller Lectureship Award: Pierre-Gilles de Gennes (Session Y29)
Each year, the APS Committee on International Scientific Affairs (CISA) will award the APS Beller and Marshak Lectureships to bring distinguished foreign scientists to speak at the March and April meetings.
The Beller Lectureship was endowed by Esther Hoffman Beller for the purpose of bringing distinguished physicists from abroad as invited speakers at APS meetings. The Marshak Lectureship, endowed by Ruth Marshak, in honor of her late husband and former APS president, Robert Marshak, provides travel support for physicists from a developing country or Eastern Europe invited to speak at APS meetings.
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N11 - Focus Session: Aerosols, Clusters, Droplets: Physics and Chemistry of Nanoobjects I
N13 - Focus Session: Ultrafast and Ultrahigh Field Chemistry I: Strong Field Phenomena
P10 - Focus Session: Frontiers in Computational Chemical Physics IV
P11 - Focus Session: Aerosols, Clusters, Droplets: Physics and Chemistry of Nanoobjects II
P13 - Focus Session: Ultrafast and Ultrahigh Field Chemistry II: Quantum Control
R10 - Focus Session: Surfaces and Interfaces in Electronic Materials I
R11 - Focus Session: Aerosols, Clusters, Droplets: Physics and Chemistry of Nanoobjects III
R13 - Focus Session: Ultrafast and Ultrahigh Field Chemistry III: Ultrafast Processes
U10 - Focus Session: Surfaces and Interfaces in Electronic Materials II
U11 - Focus Session: Aerosols, Clusters, Droplets: Physics and Chemistry of Nanoobjects IV
V10 - Focus Session: Surfaces and Interfaces in Electronic Materials III
V11 - Focus Session: Aerosols, Clusters, Droplets: Physics and Chemistry of Nanoobjects V
W10 - Focus Session: Surfaces and Interfaces in Electronic Materials IV
W11 - Focus Session: Aerosols, Clusters, Droplets: Physics and Chemistry of Nanoobjects VI

DCP/DBP
A13 - Focus Session: Spectroscopy of Biomolecules from Isolated Molecules to Cell Environment I
B13 - Focus Session: Spectroscopy of Biomolecules from Isolated Molecules to Cell Environment II
D13 - Focus Session: Spectroscopy of Biomolecules from Isolated Molecules to Cell Environment III
G13 - Focus Session: Spectroscopy of Biomolecules from Isolated Molecules to Cell Environment IV

DFD
H21 - Focus Session: Microfluidic Physics I

DFD/DBP
R21 - Focus Session: Biological Hydrodynamics I
U28 - Focus Session: Biological Hydrodynamics II

DFD/GSNP
P8 - Focus Session: Jets, Shocks & Splashes

DMP
A18 - Focus Session: Carbon Nanotubes: Synthesis and Growth I
A35 - Focus Session: Nanoscale Thermal, Thermoelectricity and Mass Transport: Measurement and Characterization
A46 - Focus Session: Wide Bandgap Semiconductors I
B18 - Focus Session: Carbon Nanotubes: Synthesis, Processing and Characterization
B35 - Focus Session: Nanoscale Thermal, Thermoelectricity and Mass Transport: Theory and Simulation
B46 - Focus Session: Wide Band Gap Semiconductors II
D18 - Focus Session: Carbon Nanotubes: Synthesis and Growth II

DMP/DCMP
A12 - Focus Session: Steps, Growth, and Smoothing
D15 - Focus Session: Atomic Tunneling, Films, Nanostructures
K12 - Focus Session: Magnetic Thin Films and Narrow Gap
## FOCUS SESSIONS

### Semiconductors
- **N12** - Focus Session: Alloy and Interface Composition
- **U12** - Focus Session: Electrochemical and Related Growth
- **V12** - Focus Session: Wetting and Hard-Soft Interfaces

### DMP/DCOMP
- **A42** - Focus Session: Planetary Materials I
- **K42** - Focus Session: Planetary Materials II
- **P42** - Focus Session: Planetary Materials III

### DMP/DPOLY
- **N32** - Focus Session: Carbon Nanotubes: Composites and Applications

### DMP/GMAG
- **A20** - Focus Session: Complex Oxide Thin Films Surfaces and Interfaces I: Superlattice Fabrication and Properties
- **D20** - Focus Session: Multiferroics I: Improper Ferroelectrics
- **G20** - Focus Session: Complex Oxide Thin Films Surfaces and Interfaces II: Surfaces and Theory
- **G32** - Focus Session: Orbital/Charge Order in Complex Oxides
- **K20** - Focus Session: Multiferroics II - Hexagonal Systems
- **N20** - Focus Session: Complex Oxide Thin Films Surfaces and Interfaces III: New Materials, New Techniques, and Effects of Strain
- **P20** - Focus Session: Cobaltites, Nickelates and Vanadates
- **R20** - Focus Session: Multiferroics III: Perovskites
- **U20** - Focus Session: Metal-Insulator Transition and Electron Phonon Coupling in Perovskites
- **W20** - Focus Session: Multiferroics IV

### DMP/GSNP
- **D33** - Focus Session: Friction, Fracture and Deformation I
- **H33** - Focus Session: Friction, Fracture and Deformation II
- **P33** - Focus Session: Friction, Fracture and Deformation III
- **R33** - Focus Session: Friction, Fracture and Deformation IV

### DPOLY
- **A30** - Focus Session: Block Copolymer Dynamics
- **D25** - Focus Session: Particle Dynamics and Organization; Polymer Tethers and Interfacial Segregation
- **G28** - Focus Session: Microphysical Properties of Block Copolymer Aggregates I
- **H25** - Focus Session: Particle Dynamics and Organization
- **K18** - Focus Session: Dillon Medal Symposium
- **K28** - Focus Session: Microphysical Properties of Block Copolymer Aggregates II
- **U30** - Focus Session: Mechanical Properties: Deformation, Rupture and Failure
- **V30** - Focus Session: Mechanical Properties: Microscale Deformation and Failure
- **W24** - Focus Session: Lithography

### DPOLY/DBP
- **W30** - Focus Session: Biopolymers at Interfaces
- **Y30** - Focus Session: Biopolymers I: Phase Transitions

### DPOLY/DMP
- **A24** - Focus Session: Organic Interfaces
- **A25** - Focus Session: Organic Field Effect Transistors
- **G30** - Focus Session: Electronic Transport in Organic Films
- **H28** - Focus Session: Energetics and Transport in Conjugated Organics
- **N25** - Focus Session: Organic Photovoltaics

### FIAP
- **A16** - Focus Session: Hydrogen Storage I
- **A17** - Focus Session: Structure and Properties of Nanoscale Oxide Films
- **B16** - Focus Session: Molecular-Scale Electronics I
- **B17** - Focus Session: Phase Transitions and Domains in Ferroelectric Nanostructures I
- **D16** - Focus Session: Negative Refractive Index I
- **D17** - Focus Session: Phase Transitions and Domains in Ferroelectric Nanostructures II
- **G17** - Focus Session: Emerging Research Devices and Materials for Microelectronics Industry I
- **H16** - Focus Session: Hydrogen Storage II
- **H17** - Focus Session: Emerging Research Devices and Materials for Microelectronics Industry II
- **K16** - Focus Session: Molecular-Scale Electronics II
- **K17** - Focus Session: Si, Ge and SiGe Nanostructures
- **N16** - Focus Session: Hydrogen Storage III
- **N17** - Focus Session: Semiconductors for THz and IR I
- **P16** - Focus Session: Molecular-Scale Electronics III
- **R17** - Focus Session: Semiconductors for THz and IR II

### GMAG/DMP
- **A19** - Focus Session: Optical and Electrical Spin Generation in Semiconductors
- **B19** - Focus Session: Transition Metal Oxide Ferromagnetic Semiconductors
- **B20** - Focus Session: Phase Competition and Separation in Perovskite Oxides
- **D19** - Focus Session: Semiconductor Spin Injection and Detection
- **D22** - Focus Session: Magnetic Nanopatterns
- **G19** - Focus Session: III-V Magnetic Semiconductors I
- **G22** - Focus Session: Magnetic Nanoparticles I
- **H19** - Focus Session: III-V Magnetic Semiconductors II
- **H22** - Focus Session: Nanoparticles and Nanocomposites
- **K19** - Focus Session: III-V Magnetic Semiconductors III
- **N22** - Focus Session: Magnetic Vortices and Exchange Biased Thin Films
- **P19** - Focus Session: Spin Interference and Spin Hall Effect
- **R19** - Focus Session: Spin Hall Effect and Spin Transport
- **R22** - Focus Session: Biomagnetism and Exchange Biased Thin Films
- **U19** - Focus Session: Semiconductor Spin Nanostuctures for Quantum Computing
- **V20** - Focus Session: Semiconductor Spin Dynamics: Optics
- **W19** - Focus Session: Semiconductor Spin Transport: Noise/Theory
- **W22** - Focus Session: Magnetic Nanoparticles II
- **Y19** - Focus Session: Novel Ferromagnetic Semiconductors I
- **Y20** - Focus Session: Ruddlesden-popper Phase Manganites
- **Z19** - Focus Session: Spin Dynamics in Quantum Dots
- **Z20** - Focus Session: Novel Ferromagnetic Semiconductors II

### GMAG/DMP/DCOMP
- **A24** - Focus Session: MAG.THY I / Spin Structures and Dynamics
- **G23** - Focus Session: MAG.THY II / Transport & General
- **N23** - Focus Session: MAG.THY III: Oxides and Phase Transitions
- **W23** - Focus Session: MAG.THY IV / ab initio Studies
Focus Sessions (cont’d)

GMAG/FIAP
R23 - Focus Session: Theory and Simulation for Information Storage Applications
Y22 - Focus Session: Coupled Thin-Film Structures for Magnetic Recording
Z22 - Focus Session: FePt Nanoparticles for Information Storage

GMAG/FIAP/DMP
A22 - Focus Session: Current Driven Magnetization Dynamics I
B22 - Focus Session: Current Driven Magnetization Dynamics II
K22 - Focus Session: Magnetization Dynamics
P22 - Focus Session: Spin Transport in Metals
U22 - Focus Session: Magnetic Tunneling I
V22 - Focus Session: Magnetic Tunneling II

GSCCM/DCMP
H42 - Focus Session: Dynamic Compression

GSNP
A33 - Focus Session: Econophysics
H8 - Focus Session: Jamming in Glasses, Grains, and Gels I
K8 - Focus Session: Jamming in Glasses, Grains and Gels II
N33 - Focus Session: Instabilities & Turbulence in Complex Fluids
N35 - Focus Session: Organization of Complex Networks
V33 - Focus Session: Social Networks

GSNP/DBP
P7 - Focus Session: Physics of Transcriptional Regulatory Networks
U26 - Focus Session: Cytoskeletal Dynamics

GSNP/DFD
B8 - Focus Session: Granular Materials Near Jamming
W8 - Focus Session: Nonlinear Electrokinetics

GQI/DCMP
D40 - Focus Session: Foundations of Quantum Theory
V40 - Focus Session: Linear Optics Quantum Computation
Poster Sessions
Exhibit Hall
Poster sessions will be held Monday, Tuesday and Wednesday. Posters will be on display from 10:00am to 5:00pm on Monday and Tuesday and from 10:00am to 4:00pm on Wednesday. Authors should be in attendance at the times listed below. APS is not responsible for poster materials that are left in the exhibit hall after the session is over. No A/V is allowed in poster sessions.

C1: Poster Session I
Monday, March 13
Authors in attendance from 2:00pm – 5:00pm
(DPOLY Session from 11:15am – 2:15pm)
Posters 1-99: DPOLY Posters I
Posters 100-152: Biological Physics
Posters 153-184: Chemical Physics
Posters 185-215: Statistical and Nonlinear Physics
Posters 216-256: Artificially Structured Materials
Posters 257-270: Instrumentation and Measurements

J1: Poster Session II
Tuesday, March 14
Authors in attendance from 2:00pm – 5:00pm
• Posters 1-19: Metals
• Posters 20-48: Semiconductors
• Posters 49-65: Insulators and Dielectrics
• Posters 66-88: Superconductivity
• Posters 89-147: Magnetism Poster
• Posters 148-195: Complex Structured Materials
• Posters 196-245: Fluids and Soft Matter Poster
• Posters 246-259: Phase Transitions and Strongly Correlated Systems
• Posters 260-292: Surfaces, Interfaces and Thin Films

Q1: Poster Session III
Wednesday, March 15
Authors in attendance from 1:00pm – 4:00pm
(DPOLY Session from 11:15am – 2:15pm)
• Posters 1-97: DPOLY Posters II
• Posters 98-122: Applications
• Posters 123-144: General Theory
• Posters 145-154: General Physics
• Posters 155-157: Quantum Fluids and Solids
• Posters 158-173: Atomic, Molecular & Optical (AMO) Physics
• Posters 174-186: Physics Education
• Posters 187-199: Quantum Information, Concepts, and Computation
• Posters 200-333: Post-Deadline Posters
GUIDELINES FOR SESSION CHAIRS

Session Codes
The number following the alpha that designates the time-block represents the sequential numbering of the sessions within the time-block. Session A1 is one of several sessions taking place in parallel in the first time-block on Monday. The number following the decimal in the session code represents the sequence of the papers to be presented in that session. For example: B3.004 = time-block B (Monday at 11:15am); Session 3 (of several) within that time-block; and the 4th paper to be presented in that session.

Poster Codes
The poster sessions will take place on Monday, Tuesday, and Wednesday in the Exhibit Hall. A breakdown of the topics presented in each category is listed on page 19.
- Monday poster sessions = Sessions C1
- Tuesday poster session = Sessions J1
- Wednesday poster sessions = Sessions Q1
Each poster presentation (board) within each poster session is numbered sequentially.

GUIDELINES FOR SPEAKERS

Oral Presentations
Please arrive at least 15 minutes prior to the scheduled time of your talk. Contributed papers are allocated 12 minutes each - 10 minutes for presentation and 2 minutes for questions from the audience, unless otherwise specified. Invited papers are allocated 36 minutes - 30 minutes for presentation and 6 minutes for questions from the audience. Note: Occasionally (and unfortunately) the chair for a session may not appear, in which case we ask that the first presenter serve as chair of the session.

Poster Presentations
If you are presenting a poster, please be sure to have your poster up prior to 10:00am on the day of your poster presentation to which you have been assigned, and taken down immediately at the end of the day. You must be on hand at the beginning of the poster session (see epitome for times). APS will not be responsible for posters left up after the end of each poster session. No A-V is allowed in the poster sessions. Posters will be on display between the hours of 10:00am to 5:00pm Monday, Tuesday; 10:00am to 4:00pm, Wednesday. Consult the Poster Session Schedule for exact times and a breakdown of poster topics.

GUIDELINES FOR SESSION CHAIRS
- Prior to the session, check the Corrigenda distributed with the Bulletin, as well as the Program-Changes Board in the registration area to see if any papers in the session you are chairing have been withdrawn.
- Arrive at the meeting room about 15 minutes prior to the start of the session and familiarize yourself with the controls for lights, microphones, A-V equipment and the timer. Technicians will be on hand to assist. If you encounter problems, you should immediately alert the Meetings Manager and/or the A-V specialist.
- Start the session on time. Briefly introduce yourself, announce the first paper and author, and start the timer.
- Please adhere to the time schedule listed in the Bulletin, so that simultaneous sessions are as closely synchronized as possible. Many attendees move from session to session in order to hear specific papers.
- Note: any time used by the speaker and/or technicians to set up laptops for LCD (Powerpoint) presentations is deducted from the time allocated for the talk.
- The allotted time for contributed papers is 12 minutes; for invited papers - 36 minutes. If you are chairing a session that includes both contributed and invited papers please be aware of the different times allocated for each and set the timer as follows:
  - Contributed papers - set timer for 8 minutes to give initial warning, then set the final bell to go off 2 minutes later. When this time is up, allow 2 additional minutes for questions relating to the paper, thank the speaker and promptly introduce the next paper and speaker.
  - Invited papers - set timer for 25 minutes for initial warning, and the final bell to ring 5 minutes later. Then set the timer for 6 additional minutes for questions from the audience. Explain the timing system to the audience prior to the start of the session, and as often during the session as you think necessary.
- • The By-Laws of the Society request that speakers be asked to stop when their allotted time is up in a courteous but firm manner. Keep in mind that the session must end on time, and that the last speaker has just as much right to an audience as does the first speaker.
- • Should a speaker fail to appear, you must wait 12 minutes before going on to the next speaker. At the end of the session, call again for the regularly scheduled paper, if time allows.
- • When two or more papers are submitted by an author, only one of these will be assigned a scheduled presentation time within that session. It is assumed that the first author listed in the abstract is the person who will present the paper at the meeting. A second abstract submitted by the same author is automatically assigned to a poster.
- • If any problems arise that you are unable to handle relative to successfully chairing the session, please inform the A-V tech in the room, or go immediately to the APS registration desk to alert the APS staff.

General A-V Policy
In keeping with our legally binding contract with our A-V vendor, speakers are not permitted to bring their own projection equipment for use at the meeting.

Standard A-V in all Sessions
The standard A-V package consists of an LCD projector, overhead projector, screen, laser pointer and 2 lapel microphones – one for the chair and one for the speakers. Any additional A-V equipment must be rented by the speaker directly through APS’s designated A-V provider located in Rooms 331-332. The speaker is responsible for the cost of renting any additional equipment.

PROGRAM FORMAT
**Policy and Guidelines on Use of LCD Projectors**

The responsibility for a smooth, technically trouble-free presentation ultimately rests with the presenter. Speakers who plan to use LCDs must do the following:

- Bring your own laptop computer, power cord, and any proprietary cords required for your computer. Do not bring your own projector to the meeting. NOTE: APS is not responsible for the security of personal laptop computers.
- Visit the Speaker-Ready room located in Room 330 to run through the presentation to ensure a smooth and technically trouble-free talk. Testing your presentation in the Speaker-Ready room prior to your presentation is strongly recommended to minimize equipment compatibility difficulties. Remember that time used to set up equipment reduces the time you have to make your presentation.
- Bring a back-up vu-graph presentation in case there are set-up difficulties with the LCD equipment.
### Divisions
- DAMOP .......... Division of Atomic, Molecular and Optical Physics
- DAP ............ Division of Astrophysics
- DBP ............. Division of Biological Physics
- DCP ............. Division of Chemical Physics
- DCMP ........... Division of Condensed Matter Physics
- DCOMP .......... Division of Computational Physics
- DFD ............. Division of Fluid Dynamics
- DLS ............. Division of Laser Science
- DMP ............. Division of Materials Physics
- DNP ............. Division of Nuclear Physics
- DPB ............. Division of the Physics of Beams
- DPF ............. Division of Particles and Fields
- DPP ............. Division of Plasma Physics
- DPOLY .......... Division of Polymer Physics

### Topical Groups
- GFBS ............ Few Body Systems Topical Group
- GFC ............. Precision Measurement and Fundamental Constants Topical Group
- GGR ............. Gravitation
- GHP ............. Topical Group on Hadronic Physics
- GIMS ............. Instrumentation and Measurement
- GMAG ........... Magnetism and Its Applications Topical Group
- GPAP ........... Topical Group on Plasma Astrophysics
- GQI ............. Quantum Information, Concepts and Computation
- GR .............. Gravitation Topical Group
- GSNP ........... Statistical and Non-linear
- GSCCM .......... Shock Compression of Condensed Matter

### Forums
- FEd .............. Forum on Education in Physics
- FGSA ............ Forum on Graduate Student Affairs
- FHP ............. Forum on History of Physics
- FIAP ............ Forum on Industrial and Applied Physics
- FIP ............. Forum on International Physics
- FPS ............. Forum on Physics and Society

### Committees
- COM ............. Committee on Minorities
- CSWP ........... Committee on the Status of Women in Physics
The following is a list of exhibitors participating in the March Meeting 2006. For complete information on exhibiting companies and their booth numbers, consult the Pocket Epitome/Exhibitor Guide distributed at registration. Please take time during the meeting to visit the exhibits. You must wear your badge to be admitted to the exhibits.

**APS Exhibit Hours:**
- Monday, March 13 • 10:00am–5:00pm
- Tuesday, March 14 • 10:00am–5:00pm
- Wednesday, March 15 • 10:00am–4:00pm

- A&N Corporation
- ADE Phase Shift
- Advanced Research Systems, Inc.
- AIP Education & Society of Physics Students
- AJA International, Inc.
- Ambios Technology
- American Institute of Physics
- American Magnetics, Inc.
- American Physical Society
- Amuneal Manufacturing Corporation
- Andeen-Hagerling, Inc.
- Applied Surface Technologies
- AR Worldwide
- Asylum Research
- ATOMISTIX
- Attocube Systems AG
- Blake Industries, Inc.
- Bruker BioSpin Corporation, EPR Division
- Cambridge Magnetic Refrigeration
- Cambridge University Press
- COMSOL, Inc.
- Cryogenic Industries of America, Inc.
- Cryogenic Control Systems, Inc.
- Cryogenic Ltd.
- Cryomagnetics, Inc.
- Cryomech Inc.
- DCA Instruments
- Easylab Technologies
- Elsevier
- Gatan
- GMW Associates
- Hamamatsu Corporation
- Hinds Instruments, Inc.
- Horiba Jobin Yvon
- ICEoxford®
- IEE/Inspec
- IOP Publishing
- J.A. Woollam Co., Inc.
- Janis Research Company, Inc.
- Keithley Instruments
- Kimball Physics, Inc.
- KLA Tencor Corporation
- Kurt J. Lesker Co.
- Lake Shore Cryotronics, Inc.
- Lay Tec GmbH
- MacKichan Software
- Mad City Labs, Inc.
- Mantis Deposition
- Material Research Society
- MDC Vacuum Products/Insulator Seal
- Molecular Imaging
- NanoAndMore USA Corp.
- Nanomagnetics Instruments
- Nanonics Imaging Ltd.
- National High Magnetic Field Laboratory
- National Nanotechnology Infrastructure Network
- National Research Council of the National Academies
- Nature Publishing Group
- Neocera, Inc.
- Nor-Cal Products, Inc.
- NOVOControl
- Oxford Instruments Superconductivity
- Oxford University Press
- Photonics Spectra
- Physics Today
- PI (Physik Instrumente) LP
- Princeton University Press
- Quantum Design
- Raith USA, Inc.
- RHK Technology, Inc.
- Rigaku Molecular Metrology
- Royal Society of Chemistry
- Scientific Cryomagnetics Ltd.
- Scientific Instruments, Inc.
- Signal Recovery
- Smithsonian/NASA ADS
- SPECS GmbH
- SPECS Scientific Instruments, Inc.
- Springer
- Staib Instruments, Inc.
- Stanford Research Systems
- STAR Cryoelectronics
- Stone Ridge Technology
- Taylor & Francis Group LLC - CRC Press
- Teachspin, Inc.
- Tristan Technologies, Inc.
- Varian Inc.
- VAT, Inc.
- Veeco Instruments
- Vericold Technologies GmbH
- VG Scienta
- WebAssign
- Wiley
- Witec Instruments Corp.
- Wolfram Research
- World Scientific Publishing Company