

APS MARCH MEETING 2006

March 13–17, 2006
Baltimore Convention Center
Baltimore, MD

General Information

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 (FEEd); 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

International Physics Instrumentation and Measurement
Quantum Information, Concepts and Computation
Education Chemical Physics
Biological Physics
Superconductivity
Fluids
Complex Structured Materials
Industrial and Applied Physics

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

PRE-MEETING PROGRAMS

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

On-site registration is available but payable in cash only – no credit cards or checks.

Students: \$50

Post Docs: \$75

Regular Members: \$100

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:

- Chandrekha 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.

PRE-MEETING PROGRAMS

NRC/NAS Town Meeting

Sunday, March 12

7:30pm – 9:30pm

Marriott Waterfront Hotel, Grand Ballroom Salon V

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.

APS MEETINGS / EVENTS

(In chronological order)

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. PGNet 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

APS MEETINGS / EVENTS

(In chronological order)

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

APS EVENTS FOR SPECIAL GROUPS

(In chronological order)

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 box-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

SATELLITE MEETINGS

(ancillary events sponsored by non-APS groups)

Sunday, March 12

High Magnetic Field Laboratory Users Group

5:00pm – 9:00pm

Marriott Waterfront Hotel/Grand Ballroom Salon X

Sunday, March 12

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

Tuesday, March 14

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

Tuesday, March 14

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

Wednesday, March 15

Status of Funding Opportunities in NSF's Division of Materials Research

5:00pm – 7:00pm

BCC/Room 338

Wednesday, March 15

MRFM Workshop (Magnetic Resonance Force Microscopy)

6:30pm – 10:30pm

Marriott Waterfront Hotel/Atlantic Room

STUDENTS LUNCH WITH THE EXPERTS

Wednesday, March 15

1:00pm – 2:30pm

Ballroom II

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 Slakey	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 NMMFL

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."



Photo not available

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 Supérieure 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."



John H. Dillon Medal

Kenji Urayama

Kyoto University

"For insightful experiments that probe the nature of polymer networks."



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."



Keithley Award

Frances Hellman

University of California, Berkeley

"In recognition of using emerging micro-machining 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."



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."



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."



LeRoy Apker Award

Nathaniel Craig

Harvard University

Matthew Paoletti

Bucknell University

"Tunable Nonlocal Spin Control in a Coupled Quantum Dot System."
"Experimental Studies of the Effects of Chaotic Mixing on an Advection-Reaction-Diffusion System."



Photo not available

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."

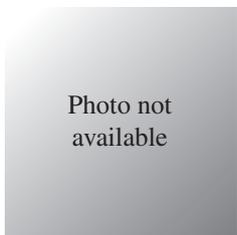


Photo not available

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."

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.

FOCUS SESSIONS

DAMOP

- A43 - Focus Session: Strongly Interacting Fermi Gases and the BCS - BEC Crossover I
 D43 - Focus Session: Vortices and Vortex Lattices in Fermi and Bose Superfluid Gases
 H43 - Focus Session: Strongly Interacting Fermi Gases and the BCS - BEC Crossover II
 U43 - Focus Session: Novel Phases in Low Dimensional Quantum Gases

DAMOP/GQI

- W43 - Focus Session: Cold Atoms in Optical Lattices

DBP

- G26 - Focus Session: Trapping of Nanoscale Biological Objects
 G29 - Focus Session: Physical and Engineering Constraints on the Function of Biological Systems
 H29 - Focus Session: Physical Aspects of Morphogenesis: Computational Approaches
 N29 - Focus Session: Physical Models of Ion Channel Function
 R26 - Focus Session: Counterion Dynamics in Charged Biopolymer Systems
 R28 - Focus Session: Biological Networks: Structure, Dynamics and Function
 W26 - Focus Session: Biological Photophysics
 Y26 - Focus Session: Physics of Physiological Systems

DBP/DCMP

- K26 - Focus Session: Single Molecule Biophysics I

DBP/DCP

- P26 - Focus Session: Protein Dynamics in Folding and Function

DBP/DFD

- N26 - Focus Session: DNA and Protein Analysis with Micro and Nano Fluidics

DBP/DPOLY

- B26 - Focus Session: Single Molecule Biophysics: DNA & RNA
 D26 - Focus Session: Dynamics of Nuclei Acid-Protein Interaction: Single Molecule
 U29 - Focus Session: Nonequilibrium Fluctuation in Biomolecules and Artificial Nanodevices
 Y29 - Focus Session: Noise and Fluctuation in Biological Systems

DBP/GSNP

- B29 - Focus Session: Micro-Organism Motility
 A39 - Focus Session: Magnesium Diboride and Related Compounds: Multi Gap Superconductivity
 D15 - Atomic Tunneling, Films, Nanostructures
 H39 - Focus Session: Josephson Junctions and Pairing State Symmetry

DCMP/DCOMP

- G39 - Focus Session: Superconductivity: Theory and Computation I

DCMP/GSCCM

- R42 - Focus Session: Plasticity and Phase Transitions

DCOMP

- D27 - Focus Session: Novel Computational Algorithms I
 G27 - Focus Session: Novel Computational Algorithms II

DCOMP/DFD

- V8 - Focus Session: Simulations Using Particles

DCOMP/DCMP

- K39 - Focus Session: Superconductivity: Theory and Computation II
 P39 - Focus Session: Superconductivity: Theory and Computation (Mainly First Principles)
 V39 - Focus Session: Superconductivity: Theory and Computation III
 Z39 - Focus Session: Superconductivity: Theory and Computations (Mostly Phonons)

DCOMP/DMP

- B32 - Focus Session: Computational Nanoscience I
 D32 - Focus Session: Computational Nanoscience II
 G31 - Focus Session: Simulation of Complex Materials I
 H31 - Focus Session: Simulation of Complex Materials II
 H32 - Focus Session: Computational Nanoscience III
 K31 - Focus Session: Simulation of Complex Materials III
 K32 - Focus Session: Computational Nanoscience IV
 R32 - Focus Session: Computational Nanoscience V

DCOMP/GSCCM/DMP

- N42 - Focus Session: Simulations of Matter at Extreme Conditions I
 U42 - Focus Session: Simulations of Matter at Extreme Conditions II
 W42 - Focus Session: Simulations of Matter at Extreme Conditions III

DCOMP/GQI

- P40 - Focus Session: Pathways to Practical Quantum Computing I
 R40 - Focus Session: Pathways to Practical Quantum Computing II

DCOMP/GQI/DAMOP

- U40 - Focus Session: Pathways to Practical Quantum Computing III

DCP

- A10 - Focus Session: Physical Chemistry of Nanoscale Systems I
 A11 - Focus Session: Promises and Challenges in Chemical Dynamics I
 B10 - Focus Sessions: Physical Chemistry of Nanoscale System II
 B11 - Focus Session: Promises and Challenges in Chemical Dynamics II
 D10 - Focus Session: Physical Chemistry of Nanoscale System III
 D11 - Focus Session: Promises and Challenges in Chemical Dynamics III
 G10 - Focus Sessions: Physical Chemistry of Nanoscale System IV
 G11 - Focus Session: Promises and Challenges in Chemical Dynamics IV
 H10 - Focus Session: Frontiers in Computational Chemical Physics I
 H11 - Focus Session: Chemical and Spectroscopic Applications of Nonlinear Optics I
 K10 - Focus Session: Frontiers in Computational Chemical Physics II
 K11 - Focus Session: Chemical and Spectroscopic Applications of Nonlinear Optics II

FOCUS SESSIONS

- N10 - Focus Session: Frontiers in Computational Chemical Physics III
- 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
- D35 - Focus Session: Thermal Transport and Thermoelectricity in Nanotubes and Graphene
- D38 - Focus Session: Magnesium Diboride and Related Compounds: Properties of Doped and Irradiated MgB₂
- D46 - Focus Session: Wide Band Gap Semiconductors III
- G18 - Focus Session: Carbon Nanotubes: Electronic and Optical Properties I
- G37 - Focus Session: Nanoscale Materials Physics of Phase Transitions I
- G38 - Focus Session: Magnesium Diboride and Related Compounds: Carbon Alloying of MgB₂
- G40 - Focus Session: Materials for Quantum Computing I
- H18 - Focus Session: Carbon Nanotubes: Electronic and Optical Properties II
- H36 - Focus Session: Single Molecule Conductance
- H37 - Focus Session: Nanoscale Materials Physics of Phase Transitions II
- H40 - Focus Session: Materials for Quantum Computing II
- H46 - Focus Session: Wide Band Gap Semiconductors IV
- K40 - Focus Session: Materials for Quantum Computing III
- K41 - Focus Session: Dielectric, Ferroelectric, and Piezoelectric Oxides II
- N18 - Focus Session: Carbon Nanotubes: Transport I
- N36 - Focus Session: Optical Properties of Nanostructures with S, Se, Te, and Ge
- N37 - Focus Session: Nanoscale Fabrication, Assembly and Semiconductor Nanowires
- N39 - Focus Session: Magnesium Diboride and Related Compounds: MgB₂ Thin Films and Junctions
- P18 - Focus Session: Carbon Nanotubes: Opto-Electronics
- P36 - Focus Session: Plasmon Resonances in Nanostructures
- P41 - Focus Session: Dielectric, Ferroelectric, and Piezoelectric Oxides III
- R18 - Focus Session: Carbon Nanotubes: Transport II
- R36 - Focus Session: Optical and X-ray Properties of Nanostructures
- R37 - Focus Session: Nanoscale Conductance Theory I
- R41 - Focus Session: Dielectric, Ferroelectric, and Piezoelectric Oxides IV
- U18 - Focus Session: Carbon Nanotubes: Transport III
- U36 - Focus Session: Optical Properties of Nano-Dots, Holes, and Wires
- U37 - Focus Session: Nanowire and Nanodot Quantum Devices
- V18 - Focus Session: Carbon Nanotubes: Transport IV
- V36 - Focus Session: Optical Properties of Carbon Nanotubes and C₆₀
- V41 - Focus Session: Dielectric, Ferroelectric, and Piezoelectric Oxides V
- W18 - Focus Session: Carbon Nanotubes: Electronic and Optical Properties IV
- W36 - Focus Session: Optical Properties of Nanostructures of Si & GaAs
- Y18 - Focus Session: Carbon Nanotubes: Adsorption and Gas Surface Interactions with Carbon Nanotubes
- Y37 - Focus Session: Probing Novel Nanostructures
- Z18 - Focus Session: Carbon Nanotubes: Double Wall Nanotubes, Sheets and Chains
- Z37 - Focus Session: Nanoscale Conductance Theory III
- 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 Nanostructures 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

- D23 - 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

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

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 1

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

PROGRAM FORMAT

Program Time-Blocks

Normally contributed and invited sessions at APS general meetings are three hours in length - three sessions per day at 8:00am, 11:15am, and 2:30pm. The time blocks are designated in alpha order beginning with time-block "A" on Monday at 8:00am, and ending with "Z" designating the 11:15 time-block on Friday.

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.

PROGRAM FORMAT & UNIT ACRONYMS

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

MARCH EXHIBIT SHOW GUIDE 2006

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