



## APS meets in Pittsburgh

**More than 7000 scientists** are expected to attend the American Physical Society's March Meeting in Pittsburgh, Pennsylvania. The main scientific program is scheduled for Monday–Friday, 16–20 March, but several pre-meeting tutorials and workshops will be held Saturday–Sunday, 14–15 March. Some 90 invited sessions and 550 contributed sessions will take place, and approximately 7000 papers will be presented.

The David L. Lawrence Convention Center, in the heart of downtown Pittsburgh, will host the scientific sessions. The nontechnical meetings will take place at the Westin Convention Center Hotel, which is connected by a skywalk to the convention center. With the latest physics-related products, computer software, and scientific publications, the Exhibit Hall, also in the convention center, will be open Monday–Wednesday.

The weekend kickoff, a two-day Division of Polymer Physics short course, will highlight the physics of polymer nanocomposites. Five pre-meeting workshops on Sunday will cover professional skills development, energy research opportunities, learning strategies for physics teachers, opportunities in biological physics, and incorporating simulations and computer modeling into upper-level physics courses. Also on Sunday will be eight tutorials—four in the morning and four in the afternoon—on Bose–Einstein condensation, graphene, plasmonics, terahertz spectroscopy, spintronics, emergent phenomena in complex ox-

ides, nanomagnetism, and Josephson qubits.

Monday evening features the annual awards program honoring those who have made outstanding contributions to physics. The program will be held from 5:30 to 6:30pm in the convention center, with a welcome reception following from 6:30 to 8:00pm.

On Tuesday and Wednesday, several APS journal-related events will take place. On Tuesday, from 2:00 to 3:30pm in the convention center, an editors' panel discussion, "APS Publishing, Present and Future," will feature short presentations that deal with issues concerning APS journals, followed by questions and comments from the audience. After the discussion, the "Meet the Editors of AIP and APS Reception" from 3:30 to 5:30pm provides an opportunity for meeting participants to voice both compliments and criticism about the American Institute of Physics and APS journals and enjoy some light refreshments. Wednesday morning, from 8:30 to 10:00am in the convention center, the "Tutorial for Authors and Referees" features editors from *Physical Review* and *Physical Review Letters*, who will provide information and tips for submitting and reviewing for APS journals, such as how to write good manuscripts, the similarities and differences in writing referee reports for *PR* and *PRL*, and productive ways in which authors, referees, and editors can work together. The "Physics Journal Q&A" will follow, 10:00–11:30am, during which APS's latest publication, *Physics*, will be discussed. *Physics* highlights exceptional papers

from the *Physical Review* journals.

On Wednesday evening, from 7:30 to 9:30pm, a special symposium, "Windows on Our Universe: Breakthroughs in Observational Cosmology," is planned for the Westin Hotel. The three speakers are Sandra Faber of the University of California, Santa Cruz, and LICK Observatory; David Weinberg of the Ohio State University; and John Ruhl of Case Western Reserve University.

At the companions' welcome breakfast on Monday, 8:30–10:00am, in the Westin Hotel, companions and families of participants can socialize and learn about Pittsburgh's many attractions. On Tuesday, the Committee on the Status of Women in Physics and the Forum on Industrial and Applied Physics are sponsoring a networking breakfast from 7:30 to 9:30am in the hotel. Both men and women are welcome to attend an informal talk presented by Lidija Sekaric of the IBM Thomas J. Watson Research Center. And on Wednesday, from 1:00 to 2:30pm in the convention center, graduate students are invited to enjoy a complimentary box lunch and take part in an informal discussion with an expert on one of several topics.

The APS Job Fair will be held Monday–Tuesday, 16–17 March, in the convention center. The fair brings together organizations looking to hire highly trained people in the sciences and physicists looking to advance in their profession.

For the most up-to-date information on the March Meeting, go to <http://www.aps.org/meetings/march/index.cfm>.

## Sessions with invited speakers

### Monday, 16 March

#### morning

DCMP: Graphene—Spectroscopies. *Basov, Li, Lanzara, Castro Neto*  
 DCMP: Transport in Oxide Interfaces. *Mannhart, Levy, Hellberg, Suzuki, Hwang*  
 DCMP: Iron-Based Superconductors: Pairing Symmetry. *Chien, Ding, Buechner, Lee, Eremin*  
 DPOLY: Polymers and Energy Applications. *Wang, Schmidt-Rohr, Loo, Nishide, Kumar*  
 FIAP: Nanostructuring with Ions. *van Kan, Lezec, Wieck, Ming, Melngailis*  
 FED/DCOMP: Computational Physics in Research and Teaching: GRC Topics and Themes. *Boghosian, Ambrose, Rapaport, Cox, Frank*  
 DBP: Systems Biology of Natural and Synthetic Circuits. *Skotheim, Ramamathan, Wingreen, Hwa, Buchler*  
 GQI: Quantum Information Meets Many-Particle Physics. *Poulin, Ortiz, Gu, Eisert, Caves*  
 DMP: Ferroelectrics I. *Junquera*  
 DMP/DCMP: Directed Organization of Nanostructured Films. *Palmstrom, Hull*  
 DCOMP: Metropolis Thesis Prize and Multiscale Modeling. *Cao*  
 GQI: Photons and Quantum Dots. *Fuchs*  
 DPOLY: The Physics of Polymer Nanocomposites: Polymer Nanoparticle Interactions. *Glotzer*  
 DPOLY: Spatially Confined Polymer Materials. *Fredrickson*  
 GMAG/DMP/FIAP: Spins in Group III–V and II–VI Semiconductors. *Bhattacharya, Chantis*  
 DMP: Nanotube Synthesis. *Curtarolo*  
 DMP: Graphene I: Electronic Properties. *Flynn*  
 DMP/DCOMP: Computational Nanoscience I: Inorganic Nanostructures and Interfaces. *Stengel, Kanai*  
 GIMS: Advances in Scanned Probe Microscopy I: Low Temperatures. *Hudson*  
 GMAG/DMP: Molecular Nanomagnets. *Wernsdorfer*  
 DCP: Fundamental Developments in Density Functional Theory I. *Yang, Burke*  
 DCP: The Chemical Physics of Biological and Biologically Inspired Solar Energy Harvesting I. *Calhoun, Baldo, Silbey*

#### midday

DCMP: New Experimental Developments in Graphene. *Ong, Abanin, MacDonald*  
 DCMP: High-Temperature Superconductors: Fermi Pockets and Quantum Oscillations. *Chakravarty, Sebastian, Johnson, Shibauchi, Taillefer*  
 FED: 10 000 Undergraduate Physics Majors: Progress on Doubling. *Hodapp, Johnson, Murnane, Marder, Bauer*  
 DPOLY: Polymer Translocation. *Slater, de Pablo, Bhattacharya, Barkema*  
 FIAP: Heterogeneous Integration on Silicon. *Kwong, Milne, Assefa, Palacios, Schlom*  
 FIP: Panel Discussion: Physics in Africa. *Animalu, Mangaliso, Boye-Faye, M'Passi-Mabiala*  
 DBP: Bacterial Growth Laws and Systems Biology. *Dennis, Scott, Klumpp, Tadmor, Narang*  
 DAMOP: Spectroscopy of Strongly Interacting Fermi Gases. *Zwierlein, Jin, Strinati, Levin, Bruun*  
 DMP: Ferroelectrics II. *Gruverman, Grigoriev*  
 DMP: Transport Properties of Nanostructures I: Surface Assemblies and Films. *Liljeroth*  
 DMP/DCMP: Structure and Dynamics of Metal Thin Films. *Shim*  
 DFD: Colloids I: Physical Behavior and Mechanisms. *Cohen*  
 GQI: Progress Towards Scalable Quantum Information Processing. *Kerman*  
 DPOLY: Templated Assembly of Polymers. *Miller*  
 DPOLY: Polymers and Ionic Liquids. *Lodge*  
 DPOLY: Polymers and Energy: Photovoltaics, Fuel Cells, Batteries I. *Singh*  
 DMP: Dopants and Defects in Semiconductors I. *Janotti*  
 GMAG/DMP/FIAP: Theory of Spin-Based Semiconductor Devices. *Barnes*  
 DMP: Nanotube Characterization. *Sauvajol, Doorn*  
 DMP: Graphene II: Electronic Properties and Quantum Hall Effect. *Park*  
 DMP/DCOMP: Computational Nanoscience II: Mechanics, Dynamics, and Assembly. *Sankey*  
 FIAP: Graphene II: Synthesis and Characterization. *Hannon, Seyller, Hong*  
 GMAG/DMP: Manganite Superlattices. *Bhattacharya*  
 GMAG: Dimers and Other Frustrated Structures. *Samulon*  
 DMP: Iron Pnictides and Other Novel Superconductors III: General Theory. *Chubukov*  
 DCP: Fundamental Developments in Density Functional Theory II. *Maitra, Ullrich*  
 DCP: The Chemical Physics of Biological and Biologically Inspired Solar Energy Harvesting II. *Mukamel, Scholes*

#### afternoon

DCMP: Phase Transitions and Transport in Quantum Hall Superfluids. *Champagne, Simon, Pellegrini, Fertig, Muraki*  
 DCMP: High-Temperature Superconductors: New Developments. *Greven, Aji, Leridon, Kaminski, Gomes*  
 FIAP/DMP: Pake, McGroddy, and Industrial Application of Physics Prizes, Adler Award. *Bishop, Wyatt, Johnson, Inoue, Torquato*  
 GQI/DCMP: Spin Qubits in Quantum Dots. *Barthel, Nowack, Coish, Warburton, Petta*  
 FHP: Origins of Silicon Valley. *Gillmor, Leeson, Riordan, Gibbons*  
 DCOMP: Predictive Materials Design for Alternative Energy Storage. *Chou, Kim, Jena, Guo, Yoon*  
 GSNP: Rare Events in Physics and Population Dynamics. *Stein, Tauber, Schwartz, Stone, Buks*

GMAG: Unconventional Spin Torques. *Bauer, Manchon, Haney, Tsoi, Urazhdin*  
 DAMOP: BEC–BCS Crossover. *Sa de Melo*  
 GQI: Foundations of Quantum Theory. *Drury, Griffiths*  
 DPOLY: Transport and Optical Properties of Conjugated Polymers and Other Solution-Processable Semiconductors. *Blom*  
 DPOLY: Grazing Incidence Scattering and New Imaging Techniques. *Wang, Jinnai*  
 GMAG/DMP/FIAP: Spins in Group IV Semiconductors. *Koiller*  
 DMP: Nanotube Manipulation and Processing. *Krupke*  
 DMP: Graphene III: Growth and Structure. *Kong*  
 DMP/DCOMP: Computational Nanoscience III: Defects, Doping, and Structure. *Zhang*  
 DMP/FIAP: Thermoelectric Materials: Oxides and Complex Crystals. *Mukerjee*  
 FED: The Physics and Astronomy New Faculty Workshops I. *Krane*  
 DMP/GMAG: Cobaltite and Manganite Films. *Ward*  
 GMAG: Quantum Magnets. *Tchernyshyov*  
 GMAG/DMP: Spin-Dependent Physics in Organic Materials and Graphene. *Yazyev*  
 DMP: Iron Pnictides and Other Novel Superconductors IV: General Experiment. *Hosono, Wen*  
 DCP: Fundamental Developments in Density Functional Theory III. *Capelle, Becke, Langreth*  
 DCP: The Chemical Physics of Biological and Biologically Inspired Solar Energy Harvesting III. *Valkunas, Aspuru-Guzik*  
 DBP/GSNP: Noise and Fluctuations in Biochemical Networks. *Pedraza, Tanase-Nicola*

#### evening

APS: Energy and the Environment. *Trenberth, Crabtree*

### Tuesday, 17 March

#### morning

DCMP: Electronic Structure of Disordered Graphene. *Martin, Stroschio, Goldhaber-Gordon, Polini, Rossi*  
 DPOLY: Polymer Physics Prize Symposium Honoring Steve Granick. *Granick, DeSimone, Russell, Douglas, Kumar*  
 DBP: New Frontiers in Biomolecular Physics. *Dunn, Grosberg, Matouschek, Plotkin*  
 DCMP: New Developments in Heavy Electron Superconductivity. *Park, Aoki, Dzero, Nakatsuji*  
 FIAP/FGSA: Physicists as Entrepreneurs. *Wu, Vispute, Economou, Chang-Hasnain, Chen*  
 DCMP/DAMOP: Quench Dynamics and Thermalization in Quantum Systems. *Olshanii, Barankov, Silva, Cardy, Schollwoeck*  
 DBP: Cellular Imaging at the Nanometer Scale. *Moerner, Hell, Lippincott-Schwartz, Jensen, Shaevitz*  
 FPS: The Greening of the City of Pittsburgh: The History, Science, and Examples. *Tarr, Davidson, Traugott, Leahy*  
 DCMP: Optical Properties of Nanostructures I: Quantum Dots. *Steel, Bawendi*  
 DMP: Transport Properties of Nanostructures II: Molecular Junctions I. *Schonenberger, Natelson*  
 DMP/DCOMP: Directed Organization of Molecular Semiconducting Films. *Kern, Pohl*  
 GQI: Semiconducting Qubit Approaches. *Morton*  
 GMAG/DMP/FIAP: Optical Generation and Detection of Spins in Semiconductors. *Ganichev*  
 DCMP: Chemical Modification of Nanotubes. *Strano*

Abbreviations preceding each entry denote the sponsoring committee (c), division (d), forum (f), or topical group (g):

COM: Minorities in Physics (c)  
 CSWP: Status of Women in Physics (c)  
 DAMOP: Atomic, Molecular, and Optical Physics (d)  
 DBP: Biological Physics (d)  
 DCMP: Condensed-Matter Physics (d)  
 DCOMP: Computational Physics (d)  
 DCP: Chemical Physics (d)  
 DFD: Fluid Dynamics (d)  
 DMP: Materials Physics (d)  
 DPOLY: Polymer Physics (d)  
 FED: Education (f)  
 FGSA: Graduate Student Affairs (f)  
 FHP: History of Physics (f)  
 FIAP: Industrial and Applied Physics (f)  
 FIP: International Physics (f)  
 FPS: Physics and Society (f)  
 GIMS: Instrument and Measurement Science (g)  
 GMAG: Magnetism and Its Applications (g)  
 GQI: Quantum Information (g)  
 GSCCM: Shock Compression of Condensed Matter (g)  
 GSNP: Statistical and Nonlinear Physics (g)



DMP: Probing and Modifying Materials with Lasers I. *Fotakis, Zhang*  
 DMP: Graphene IV: Electronic and Structural Properties. *Ruoff*  
 DCMF: Advances in Scanned Probe Microscopy II: Force Methods. *Custance*  
 DMP/FIAP: Thermoelectric Materials: Transport Physics. *Datta, Majumdar*  
 DMP/GMAG: Superconducting and Magnetic Oxide Superlattices and Films. *te Velthuis, Bernhard*  
 DMP/GMAG: Vanadate Thin Films. *Sharoni*  
 GMAG/DCOMP/DMP: Theory and Simulation of Spin-Dependent Effects and Properties I: First-Principles Calculations. *Ruban*  
 DCMF: Iron Pnictides and Other Novel Superconductors V: Tunneling, PCAR, Josephson. *Gonnelli*  
 DCP: Spectroscopic Probes of Biomolecular Structure and Function I. *Warncke, Anfinrud, Kohler*  
 DCP: Theory of Electron Transport Through Molecules I. *Reimers, Dunietz*

## midday

DCMP: Ballistic-Diffusive Crossover in Graphene Electron Transport. *Bolotin, Adam, Folger, Mucciolo, Chamon*  
 DCMF: Dynamical Layer Decoupling and Stripe-Order High- $T_c$  Superconductors. *Schafgans, Berg, Hinkov, Norman, Kim*  
 DCMF: SQUID Amplifiers: At the Quantum Limit. *Devoret, Castellanos-Beltran, Yamamoto, Kinion, Spiez*  
 CSWP/FIP: Panel Discussion: Around the World in 180 Minutes: Differences and Similarities Among Women Physicists. *Lessner, Franz, Zastavker, El Sayed, Kim, Tanner, Spencer*  
 DPOLY: Polymer Nanoparticle Interactions. *Smith, Krishnamoorti, Spontak, Li, Starr*  
 DCOMP: Computational Modeling of Crystallization and Nucleation Phenomena. *Kelton, Sanz, Molinero, Li, Colombo*  
 GSNP/DBP: Complex Cellular Biological Networks. *Maslov, Reed, Motter, Hawoong, Albert*  
 FED/FIAP: Preparing Physics Students for Careers in Industry. *Czujko, Zollner, Kalelkar, Cohen, Van Keuren*  
 GSNP: Elasticity and Geometry of Thin Objects II. *Brenner*  
 DMP: Optical Properties of Nanostructures II: Quantum-Dot-Coupled Systems. *Awschalom*  
 DAMOP: Disorder in Ultracold Gases. *DeMarco*  
 GQI: Superconducting Phase Qubits. *Lucero*  
 DMP/DPOLY: Charge Transport and Optical Properties of Organic Semiconductors. *Iwasa, Bredas*  
 DMP: Dopants and Defects in Semiconductors II. *Shahedipour-Sandvik*  
 GMAG/DMP/FIAP: Optical Control and Electron-Nuclear Effects in Quantum Dots. *Kim*  
 DMP: Nanotube Applications. *Bachtold*  
 DMP: Graphene V: Structure and Raman Spectroscopy. *Ferrari*  
 DMP/DCOMP: Computational Nanoscience IV: Carbon- and Silicon-Based Nanostructures. *Liu*  
 GIMS: X-Ray and Neutron Instruments and Sciences I. *Wang*  
 FIAP: Graphene Device and Applications I. *Lin, Zheng, Chen*  
 GMAG/DMP/FIAP: Spin Currents in Metals—New and Miscellaneous Topics. *Moriyama*  
 DMP/GMAG: Multiferroic Manganites. *Harris*  
 DMP/GMAG: Magnetic Multilayers. *Thiele, Liu*  
 DCMF: Iron Pnictides and Other Novel Superconductors VII: Pressure Effects and Thermal Expansion. *Canfield*  
 DMP: Iron Pnictides and Other Novel Superconductors VIII: Magnetism (Experiment). *Christianson*  
 DCP: Spectroscopic Probes of Biomolecular Structure and Function II. *Tycko, Ge, Miller*  
 DCP: Theory of Electron Transport Through Molecules II. *Ratner, Stokbro*  
 DBP: Biological Physics II. *Newman, Crocker*

## afternoon

DPOLY: John H. Dillon Medal Symposium in Honor of Venkat Ganesan. *Ganesan*  
 DCMF: Buckley and Lilienfeld Prize. *Miyazaki, Meserve, Moodera, Tedrow, Shankar*  
 DCMF: Iron-Based Superconductors: Competing Orders. *Wang, Dai, Yildirim, Carrington, Chen*  
 COM: The Dynamics of Diversity in Astrophysics. *Gladney, Masood, Carruthers, Daly, Oluseyi*  
 DCMF: Competing Ground States and Novel Excitations in Strongly Correlated Metals. *Paschen, Aronson, Yamamoto, Julian, Woelfle*  
 DFD: Earth and Space Magneto-Fluid Dynamics. *Bellan, Hawley, Olson, Müller, Zank*  
 DBP: Mechanics of Biomolecular Systems. *Nelson, Parthasarathy, Schulten, Tkachenko, Wang*  
 DCMF/GSNP: Jamming at Nonzero Temperature and Stress. *Xu, Teitel, Dauchot, Durian, Maloney*  
 GSNP/DBP: Systems Far from Equilibrium II. *ben-Avraham*  
 DMP: Transport Properties of Nanostructures III: Molecular Junctions II. *Tao, de Boer*  
 DMP/DCMP: Photocatalysis and Photovoltaic: Excitation, Trapping, and Transport of Charge Carriers at Surfaces and Interfaces. *Frei, Kanan*  
 DBP: Advanced Techniques in Acceleration and Coherent Radiation. *Kim, Zholents, Shvets, Bisognano, Corkum*  
 DMP/DPOLY: Ionically Gated and Conventional OFETs and Related Devices. *Frisbie*  
 GMAG/DMP/FIAP: Spin-Orbit Effects in Semiconductors. *Grifoni*  
 DMP: Electronic Properties of Nanotubes. *Bockrath*  
 DMP: Probing and Modifying Materials with Lasers II. *Garrison*  
 DMP: Graphene VI: Phonons and Raman Spectroscopy. *Malard*

FIAP: Graphene Device and Applications II. *Robinson, Enoki*  
 DMP/FIAP: Thermoelectric Materials: Tellurides. *Heremans*  
 FED/DCOMP: Incorporating Computational Physics into Teaching. *Gottlieb*  
 DMP/GMAG: Multiferroics I. *Choi, Kenzelmann*  
 GMAG/DMP/FIAP: Spin Transport and Exchange Bias in Nanostructures. *Casanova*  
 DMP/GMAG: Hybrid Magnetic Superconducting Systems. *Villegas*  
 DCP: Spectroscopic Probes of Biomolecular Structure and Function III. *Asher, Gloaguen*  
 DCP: Theory of Electron Transport Through Molecules III. *Kosov, Thoss*  
 DBP: Theories and Simulations for Biomolecular Dynamics in Cell-like Environments. *Grason*

## Wednesday, 18 March

### morning

DCMP: Optoelectronic Manipulation and Control of Charges and Spins in Quantum Dots. *Bayer, Gammon, Kallias, Das Sarma, Mikkelsen*  
 DCMF: Critical Spin Liquids in Strongly Correlated Systems. *Kato, Takagi, Motrunich, Kim, Sheng*  
 DCMF: Iron-Based Superconductors: Correlation Effects. *Lu, Qazilbash, Si, Hu*  
 DPOLY: Physics of Polymer Membranes for Water Purification. *Cahill, Hsiao, Mallouk, Bakajin, Reneker*  
 DFD/DCOMP: Fluid Dynamics and Computational Science. *Padoan, Karniadakis, Chen, Zhang, Elghobashi*  
 DAMOP: Ultracold Gases with Dipolar Interactions. *Ospelkaus, Demler, Stamper-Kurn, Griesmaier, Zoller*  
 FED/FPS: Forging Effective Partnerships with Your Local Science Center: Outcomes from the Workshop on University/Science Center Collaborations. *Statman, Kadanoff, Marshall, Finotello*  
 FHP: Centenary of Lev Landau. *Hohenberg, Pitaevskii, Pokrovsky, Dzyaloshinskii, Sagdeev*  
 FIAP: Multiferroics II. *Lebeugle*  
 DCMF: Transport Properties of Nanostructures IV: Correlation Effects. *Thygesen*  
 DMP/DCMP: Characterization and Modeling of Complex Surfaces and Interfaces. *Kaplan, Cagin*  
 DCOMP/GSCCM: Extreme Conditions and High Pressure I: Chemistry. *Yoo*  
 GMAG/DMP/FIAP: Spin Hall and Other Spin-Orbit Effects in Semiconductors. *Dyakonov*  
 DMP: Electron Transport in Nanotubes. *McEuen*  
 DMP: Graphene VII: Electronic Properties. *Schedin, Katsnelson*  
 GIMS: Advances in Scanned Probe Microscopy III: High Frequency and Optical Techniques. *Novotny*  
 FIAP: Thermoelectricity in Silicon-Containing Materials. *Donadio*  
 DMP/GMAG: Manganites. *Dong*  
 DMP/GMAG: Oxide Surfaces and Interfaces. *Pickett*  
 GMAG: Spin Ice. *Ke*  
 GMAG/DMP: Spin-Dependent Physics in Organic Materials. *Epstein*  
 DCMF: Iron Pnictides and Other Novel Superconductors IX: Mostly Transport. *Balakirev*  
 DCP: Structure and Dynamics of Interfacial Water I. *Wolf, Winter, Beratan*  
 DCP: Nanomaterials for Energy Applications I. *Wong, Shivaram*

### midday

DCMP: Memory and Focusing in Catastrophic Deformations. *Berry, Zhang, Mullin, Zhang*  
 DCMF: New Insights into Hidden Order in  $\text{URu}_2\text{Si}_2$ . *Chandra, Denlinger, Wiebe, Hassinger*  
 DMP: Physics and Culture. *Wang, Ouellette, Perkowitz, Gibson, Schuller*  
 DPOLY/GSNP: Polymer Surface Instabilities. *Gent, Hayward, Reis, Chaudhury, Damman*  
 FIAP: Plasmonics in Future Electronics. *Pickard, Stockman, Zia, Bozhevolnyi, Wang*  
 FED: Physics Demonstrations and Strategies for Teaching and Public Outreach. *Radzilowicz, Zentner, Pollock, Franklin, Hennessy*  
 DBP: Physics of the Immune System. *Chakraborty, Deem, Or-Guil, Quake, Dinner*  
 GMAG: Quantum Spin Dynamics and Relaxation in Molecular Magnets. *Takahashi, del Barco, de Loubens, Chiorescu, Nellutla*  
 GSNP: Dynamics of Glassy Systems. *Wyart*  
 FIAP: Multiferroics III and Dielectrics. *Sharma*  
 DMP: Optical Properties of Nanostructures IV: Optical Antennas and Plasmonics. *Schuller*  
 DAMOP: Dipolar Gases and Ultracold Molecules. *Pu, Dieckmann*  
 DMP: Dopants and Defects in Semiconductors III. *Luepke*  
 GMAG/DMP/FIAP: Spins in Quantum Dots and Manganese in Arsenides. *Kioseoglou*  
 DMP: Optical Response of Nanotubes. *Hartschuh*  
 DMP: Graphene IX: Structure and Strain. *Pereira*  
 DMP: Hydrogen Storage/Nanomaterials for Energy. *Long*  
 DMP/GMAG: Ordering in Complex Oxides. *Khomskii*  
 DMP/GMAG: Oxide Superlattices. *Andersen, Chakhalian*  
 GMAG: Spinels, Pyrochlores and General. *Balents*  
 DMP/GMAG: Superconductivity: Magnetic Properties. *Karapetrov*  
 DCMF: Iron Pnictides and Other Novel Superconductors X: Spectroscopy. *Ishida*  
 DCP: Structure and Dynamics of Interfacial Water II. *Johnson, Nilsson, Bonn*  
 DCP: Nanomaterials for Energy Applications II. *Zhong, Yaghi, Schaak*  
 DBP: Physical Mechanisms of Membrane Remodeling. *Bassereau, Tamm*

### afternoon

DCMP: Probes of Nanoscale Magnetism. *Bode, Rugar, Pelekhov, Bigot, Fischer*

DCMP/DMP: Electron, Exciton, and Phonon Interactions in Nanoparticles. *Stephan, Ouyang, Klimov, Atwater, Govorov*  
 GIMS: Keithley Award Session. *Schoelkopf, Clarke, Lehnert, Prober, Siddiqi*  
 DCMP/DAMOP: Polariton Condensates. *Littlewood, Snoke, Yamamoto, Sanvitto, Kavokin*  
 FIAP/DBP: Industrial Biophysics. *Razinkov, Larkin, Olego, Laderman, Skolnick, Trainoff*  
 FIAP/FGSA: Panel Discussion: Preparation of Graduate Students for Careers in a Globalized World. *O'Hara, Flatten, Benmokhtar, Venkatesan, Cox*  
 GSNP/DPOLY: Patterns on Thin Elastic Sheets. *Liang, Sharon, Menon, Lee, Huang*  
 DCMP: Onsager Prize, Nicholson Medal, Apker Award, Davisson-Germer Prize. *Sreenivasan, Shastry, Datta, Chabal, Raghavachari*  
 GSNP: Stochastic Processes in Biological Systems I. *Chou*  
 DMP: Optical Properties of Nanostructures V: Plasmonics and Metamaterials. *Shalaev*  
 GQI: Materials in Superconducting Qubits. *McDermott, Palmer*  
 DPOLY: Organic Photovoltaics and Other Photonic Devices. *Peumans*  
 DPOLY: Magnetic Properties of Organic Semiconductors/Surface Characterization of Organic Materials. *Wohlgangen, Epstein, Koch*  
 GMAG/DMP/FIAP: Gallium Manganese Arsenide. *Ohno*  
 DMP: Excitonic Effects in Nanotubes. *Prezhdo, Cognet*  
 DMP: Graphene XI: Scanning Probes I. *Liljeroth*  
 FIAP: Pulsed Laser Deposition of Electronic and Photonic Thin Films and Nanostructures. *Kolagani, Norton*  
 FIAP/DMP: Thermoelectric Materials: Nanostructures. *Chen*  
 FED: NSF's Research Experience for Undergraduates (REU) Program: Overview and Perspectives. *Affatigato*  
 DMP/GMAG: Excitations in Multiferroics. *Furukawa, Valdes Aguilar*  
 DMP/GMAG: Magnetic, Electric, and Photo-Induced Magnetization Reversal. *Acremann*  
 GMAG/DMP/FIAP: Gilbert Damping and Nonlocal Spin Injection. *Garate*  
 DCP: Structure and Dynamics of Interfacial Water III. *Lee, Rubio*  
 DCP: The Transition State in Physics, Chemistry, and Astrophysics I. *Haller, Berry, Uzer*  
 DBP: Physical Virology. *Schwartz, Conway*  
 DBP: Knots and Loops in Biomolecules. *Sulkowska, Virnau*

## evening

APS: Windows on Our Universe: Breakthroughs in Observational Cosmology. *Ruhl, Faber, Weinberg*

## Thursday, 19 March

### morning

DBP: Noise in Biological Systems. *Rappel, Falcke, Wu, Huang, Volman*  
 DCMP/DPOLY: Constrained Polymers. *Saleh, Kim, Chklovskii, Bar-Ziv, Thirumalai*  
 DCMP/DAMOP: Correlated Phases in Fermi Gases of Ultracold Atoms. *Moritz, Ketterle, Kollath, Parish, Jochim*  
 DPOLY/DCMP: Microgels: Colloidal Properties of Gels. *Yodh, Trappe, Kim, Dinsmore, Fernandez-Nieves*  
 FIAP: Computational Design of Hydrogen Storage Materials. *Wolverton, Siegel, Zhang, Mueller, Gunaydin*  
 DCOMP: Recent Advances in Biomolecular Simulations. *Parrinello, Hodak, Berne, Voth, Clementi*  
 GMAG: Applications of Magnetic Thin Films with Tilted Anisotropy. *Gao, Wang, Albrecht, Zha*  
 FPS/DBP: The Physics of Imaging and Radiotherapy. *Boone, Pan, Yu, Jaffray, Berman*  
 GSNP: Structure and Dynamics of Complex Networks. *Toroczka*  
 DPOLY/DBP: Physics of Green Polymers and of Biocompatibility. *Hsu, Xia*  
 DPOLY: Hierarchically Ordered Systems. *Xu*  
 DCOMP/GSCCM: Extreme Conditions and High Pressure III: Electronic Transitions and Mixtures. *Collins*  
 DMP: Nanotube-Related Hybrid Structures. *Rotkin*  
 DMP: Graphene XIII: Spectroscopic and Transport Properties. *Potemski, Stauber*  
 GIMS: Emerging Scanning Probe Microscopy Methods for Biological Applications. *Akhremitshev, Huey*  
 FIAP: Graphene Device and Applications III. *Shepard, Coleman*  
 DMP/GMAG: Multiferroic Properties of Oxide Films. *Holcomb*  
 GMAG: Frustration Theory and Modeling. *Starykh*  
 DCP: The Transition State in Physics, Chemistry, and Astrophysics II. *Waalkens, Bartsch, Komatsuzaki, Yano*

### midday

DCMP: Supersolids. *Pollet, Beamish, West, Mulders, Nyeki*  
 DCMP/GQI: Progress in Understanding the Nature of the 5/2 Fractional Quantum Hall State. *Peterson, Toke, Feiguin, Gervais, Pinczuk*  
 DBP: Physics of Circulating Tumor Cells and Metastasis. *Wirtz, Grzybowski, Tseng, Datar, Bruce*  
 DCMP/GMAG: Recent Progress in Spin-Spiral Ferroelectricity. *Kimura, Mostovoy, Onose, Kiryukhin, Dagotto*  
 FPS: Physics Meets Art. *Lu, Jones-Smith, Falco, Weaire*  
 GQI: Progress on Quantum Optics with Circuit Quantum Electrodynamics. *Wallraff, Koch, Hofheinz, Solano, Schön*  
 DBP: Information Theory in Biology. *Bialek, Wiggins, Sharpee, Mehta, Shraiman*  
 GIMS: Forefront Detectors for Synchrotron Radiation. *Siddons, Graafsma, Gruner, Broennimann*  
 DPOLY: Mechanical Force Spectroscopy and Device Applications of Polymeric and Biological Materials. *Ortiz*

GMAG/DMP/FIAP: Dilute Magnetic Nitride Semiconductors. *Bonanni*  
 DMP/DCOMP: Computational Nanoscience V: Transport. *Güçlü*  
 DMP: Graphene XV: Scanning Probes II and Hall Effect. *Zhang*  
 FIAP/DMP: Device Applications of Multiferroic Structures. *Srinivasan, Rokhinson*  
 GMAG/DMP/FIAP: Current-Induced Oscillations. *Gao*  
 DMP/GMAG: Ruthenates. *Cao*  
 GMAG/DCOMP/DMP: Theory and Simulation of Spin-Dependent Effects and Properties II. *Hrkac*  
 DCP: Ion Channel Physics and Chemical Physics I. *Cheng, Beck, Pratt, Jayaraman*

### afternoon

DCMP: Persistent Currents in Normal Metals. *Buttiker, Bleszynski-Jayich, Bluhm, Entin-Wohlman, Waintal*  
 DCMP: Vortex Dynamics and Josephson Lasers in Superconductors. *Beidenkopf, Moler, Koshelev, Kadowaki*  
 DCMP: Spin Hall and Quantum Spin Hall Effects. *Stern, Zhang, Molenkamp, Fu, Hasan*  
 DPOLY: Responsive Gels at Surfaces and in the Bulk. *Balazs, Toomey, Craig, Vaia, Shear*  
 GSNP: Active Soft Matter: From Granular Rods to Flocks to Living Cells. *Kudrolli, Giardina, Baskaran, Koenderink, Safran*  
 DCOMP: Rahman Prize Lecture and Theory of Multiferroics. *Young, Delaney, Iñiguez, Malashevich, Whangbo*  
 DBP: DNA Loop Formation, Nucleosome Positioning, and Transcriptional Regulation. *Morozov, Finzi, Guthold, Kahn, Meiners*  
 FHP: 50 Years of Anderson Localization. *Thouless, Dynes, Segev, Lerner, Aspect*  
 GSNP: Jamming: Theory and Experiment II. *Utter*  
 DPOLY: Long-Range Order in Polymer Structures and Morphologies. *Ross*  
 DMP: Hydrogen Storage: Complex Hydrides. *Majzoub*  
 DMP: Graphene XVII: p-n Junctions, Nanoribbons, and Quantum Dots. *Zhang*  
 FIAP/DMP: Magnetoelectric Coupling in Multiferroic Systems. *Kim, Zhao*  
 GMAG/DMP/FIAP: Current-Induced Dynamics in Magnetic Tunnel Junctions and Spin Waves. *Chshiev*  
 DMP/GMAG: Cobaltites. *Leighton*  
 DMP/GMAG: Magnetic Nanostructures: Domain Walls, Reversal, Oscillators. *Shaw, Akerman*  
 DMP: Iron Pnictides and Other Novel Superconductors XV: Electronic Structure and Magnetism. *Singh*  
 DCP: Ion Channel Physics and Chemical Physics II. *Krapf, Sukharev, Kurnikova*  
 DBP: Crystal Growth of and Moderated by Proteins. *De Yoreo, Yeh*

## Friday, 20 March

### morning

DCMP: Superconductivity and Quantum Transport in Nanowires. *Rogachev, Shah, Sachdev, Khlebnikov, Kouwenhoven*  
 DCMP: Advances in Optical Microscopy. *Gustafsson, Cerbino, Grier, Ventalon, Manley*  
 DCMP: Multi-Valley Electron Systems in the Quantum Limit. *Li, Benoit, Kopelevich, Shayegan, McFarland*  
 GMAG: New Insight into Exchange Bias from Advanced Scattering Techniques. *Sinha, Hauet, Feygenson, Batlle, Majetich*  
 DBP: Self-Organization in Biological Cells and Tissues II. *Nakagaki, Bodenschatz, Karma, Goldstein, Lee*  
 DCMP/DAMOP: Novel Orbital Quantum Phases in Cold Atom Optical Lattices. *Mueller, Porto, Liu, Wu, Scarola*  
 GSNP/DCMP: The Statistical Properties of Forces in Jammed Granular Matter. *Behringer, Henkes, Corwin, Tighe, Schröter*  
 GIMS: Pushing the Limits of Mechanical Detection. *Aspelmeyer, LaHaye, Mamin, Kapitulnik, Mavalvala*  
 DMP: Optical Properties of Nanostructures VI: Artificially Structured Materials. *Tiago*  
 GQI: Quantum Metrology and Nanomechanics. *Capellaro*  
 DPOLY: Surface Instabilities and Adsorbed or Grafted Layers. *Lin*  
 DPOLY: Biological-Synthetic Hybrid Materials. *Pochan*  
 GMAG/DMP/FIAP: Spin Resonance in Semiconductors. *Ramanathan*  
 DMP: Hydrogen Storage: Atomic and Molecular Motions. *Conradi*  
 GMAG: Spin Liquids. *Kofu*  
 GMAG/DMP: LAO/STO Interfaces. *Herranz*  
 GMAG: Neutron Scattering. *Ruff, Khodas*  
 GMAG/DMP/FIAP: Current-Induced Magnetic Switching. *Braganca*

### midday

DCMP: Quasiparticles and Non-Abelian Statistics in the 5/2 State. *Halperin, Heiblum, Radu, Willett, Nayak*  
 DCMP: Detection of Non-Gaussian Noise in Mesoscopic Systems. *Pekola, Pothier, Dykman, Sukhorukov, Grabert*  
 DPOLY/DBP: Non-viral-based Gene Delivery Systems: Opportunities, Obstacles, and Challenges. *Huang, Mahato, Liu, Wu, Kabanov*  
 DPOLY/DBP: Biological Polyelectrolytes. *Bloom, Dobrynin, Wong, Schlick, Shklovskii*  
 FIAP: Physics in the Aerospace Industry. *Hammond, Glaros, Holmes, Shpantzer, Mellon*  
 DCOMP: Impact of NSF's TeraGrid on Physics Research. *Roskies, Kohlmeier, Di Matteo, Johnson, Aksimentiev*  
 DBP: Nanoprobes of Molecules and Cells. *Meller, Stein, Roukes, Liphardt, Cohen*  
 DBP: Statistical Physics in Biology. *Banavar, Cieplak, Jose, Liu, Rokhsar*  
 GMAG/DMP/FIAP: Quantum Spin Hall Effect. *Yao*