

Some 7000 people will descend upon Baltimore this month for the American Physical Society's annual March meeting, which has more than 90 invited sessions, some 550 contributed sessions, more than 200 focus sessions, and three poster sessions. Topics range from condensed matter physics, materials physics, high polymer physics, and fluid dynamics to chemical and biological physics, laser science, computational physics, industrial and applied physics, and atomic, molecular, and optical physics. There are also dozens of group and division business meetings, symposia, workshops, socials, and receptions throughout the week.

The meeting, which runs from Monday, 13 March through Friday, 17 March, with pre-sessions scheduled for Saturday, 11 March and Sunday, 12 March, is well past its centennial. Specific information on session and other program descriptions is available at http://www.aps.org/meet/MAR06. All scientific sessions and some APS-sponsored sessions are held at the Baltimore Convention Center; other satellite sessions are convening at the Marriott Waterfront Hotel, the headquarters hotel for the meeting.

A special feature of this year's meeting because of its location is a two-day schedule of congressional visits slated for Wednesday, 15 March and Thursday, 16 March. The APS Office of Public Affairs (OPA), which has organized the visits, seeks attendees from as many districts and states as possible to travel to Capitol Hill to meet with US senators and representatives to educate them on the importance of science research funding.

Pre-meeting programs include a

short course on "Polymers in Existing and Emerging Patterning Technologies," from 8:30am to 5:00pm Saturday, 11 March and 8:30am to 3:00pm Sunday, 12 March at the convention center. Tutorials, also at the convention center, include Sunday morning sessions on spintronics, interpretations of quantum mechanics, molecular magnetics, and thermoelectric energy conversion. Sunday's afternoon tutorials cover cavity QED, spallation neutron sources, lithography, and polymeric templating.

A workshop on professional skills development for women physicists is being held from 8:00am to 5:00pm Sunday at the Marriott, followed by a reception there from 5:00pm to 6:30pm. The workshop will offer training on persuasive negotiation and communication skills for tenure-track and newly tenured women physicists. In addition, a networking breakfast for women in physics is Tuesday from 7:30am to 9:30am at the Marriott.

Also in the career arena is a workshop on opportunities in biology for physicists, from 8:00am to 6:00pm Sunday at the convention center. A free career workshop open to all attendees runs from 3:00pm to 7:00pm Sunday at the convention center. Registration and check-in for the APS Job Fair, which last year helped join hundreds of job seekers and some 50 employers, is from 1:00pm to 4:00pm Sunday at the convention center, and the fair itself runs from 10:00am to 5:00pm Monday and Tuesday and from 10:00am to 4:00pm Wednesday.

Special symposia include "Emerging Emergent Phenomena," 8:00pm to 10:00pm Monday at the Marriott; "Intelligent Design: Its Impact and Re-

sponses to It," 7:30pm to 9:30pm Tuesday at the Marriott; "Perspectives on Our Energy Future," 7:30pm to 9:00pm Wednesday at the Marriott; and "The Changing Dynamics of Industrial Research as a Consequence of Global Trends," sponsored by APS and the American Institute of Physics, 11:15am to 2:15pm Thursday at the convention center.

Six APS journals and eight AIP journals are represented at the conference; an APS journal editors' panel discussion is from 2:30pm to 3:30pm Tuesday at the convention center. A "Meet the Editors" session follows from 3:30pm to 5:30pm Tuesday at the center.

Poster sessions and the exhibit show, which features such products and services as laser and optical component equipment, test and measurement equipment, scientific software, and spectroscopy equipment, are at the convention center; hours for both are 10:00am to 5:00pm Monday and Tuesday and 10:00am to 4:00pm Wednesday.

Other events include a companion breakfast Monday from 8:00am to 9:30am at the Marriott, a welcome reception Monday from 6:45pm to 8:00pm at the convention center, and a physics sing-along and listen-along Wednesday from 9:00pm to 10:00pm at the Marriott. A program aimed at physics high-school teachers is scheduled for Tuesday from 8:00am to 2:30pm at the Marriott; a networking lunch for students to provide a chance to meet experts in their field of interest is Wednesday from 1:00pm to 2:30pm at the convention center, and a student reception follows on Wednesday from 5:30pm to 6:30pm at the center.

Sessions with Invited Speakers

Monday, 13 March

morning

DCMP: Quantum Properties of Superconducting Nanowires. Sachdev, Tian, Rogachev, Khlebnikov, Arutyunov.

DCMP: Magnetic-Ferroelectric Coupling in Multiferroics. Cheong, Vajk, Harris, Chu, Mostovoy.

DCMP: Bilayer 2D Systems: Interlayer Drag and Spontaneous Coherence. Pillarisetty, Das Sarma, Kivelson, Simon, Pellegrini.

DPOLY: Particle Self Assembly. Crocker, Starr, Hammond, Douglas, Walker. DMP/FIAP: Advanced Materials for Energy Applications. Dresselhaus, Kanatzidis, Christensen, Mavrikakis, Schubert.

DCOMP: Frontiers of Computational Materials. Asta, Johnson, Marzari, Hart, Kolmogorov.

DBP: Bacterial Flagellar Dynamics, Polymorphism, and Conformational Spread. Powers, Stark, Darnton, Shaevitz.

DCP: Physical Chemistry of Nanoscale Systems I. Nesbitt, Van Duyne. DCP: Promises and Challenges in Chemical Dynamics I. Shapiro, Lin.

DMP/DCMP: Steps, Growth, and Smoothing. *Margetis*. DCP/DBP: Spectroscopy of Biomolecules from Isolated Molecules to Cell

Environment I. Anfinrud, Spence.

FIAP: Hydrogen Storage I. Pinkerton.

FIAP: Structure and Properties of Nanoscale Oxide Films. Pennycook, Freund. DMP: Carbon Nanotubes: Synthesis and Growth I. Hata.

GMAG/DMP: Optical and Electrical Spin Generation in Semiconductors. Sipe.

DMP/GMAG: Complex Oxide Thin Films Surfaces and Interfaces I: Superlattice Fabrication and Properties, Varela.

GMAG/FIAP/DMP: Current Driven Magnetization Dynamics I. Pufall.

DPOLY/DMP: Organic Field Effect Transistors. Marks.

DPOLY: Block Copolymer Dynamics. Morse.

GSNP: Econophysics. Yakovenko.

DMP: Nanoscale Thermal, Thermoelectric, and Mass Transport: Measurement and Characterization. Fon.

DMP/DCOMP: Planetary Materials I. De Gironcoli, Lin.

DAMOP: Strongly Interacting Fermi Gases and the BCS-BEC Crossover I. Hecker Denschlag.

DMP: Wide Bandgap Semiconductors I. Wetzel.

DCMP: DCMP/DCOMP Prize Session. Clark, Meyer, Merlin, Vanderbilt.

DCMP: Solid Helium. Clark, Beamish, Dai, Reatto, Ceperley.

GSNP: Uncovering the Structure of Complex Networks. Newman, Guimera, Vicsek, Muñoz, Almaas.

DMP/FIAP: Advances in ZnO Materials Physics and Applications. Van de Walle, Tsukazaki, Brillson, Hsu, Norton.

FPS: Nuclear Proliferation and Nuclear Terrorism. Cirincione, Fetter, Park, Carter.

DCMP: Spin-Based Quantum Computing. Hanson, Ghosh, Flatte, Finley, Burkard.

DBP/DCMP: Bionanotechnology: Application and Fundamental Aspects of Processes at the Nanoscale. Eisenberg, Kosztin, Stein, Yu, Kohli.

GSNP/DFD: Granular Materials near Jamming. Campbell, Daniels. DCP: Focus Sessions: Physical Chemistry of Nanoscale System II. El-Sayed,

DCP: Promises and Challenges in Chemical Dynamics II. Jortner, Brus. DCP/DBP: Spectroscopy of Biomolecules from Isolated Molecules to Cell Environment II. De Vries, Jerrold, Simons.

DCMP: Metals: Lattice, Low D, Phonons. Burin.

FIAP: Molecular-Scale Electronics I. Champagne.

FIAP: Phase Transitions and Domains in Ferroelectric Nanostructures I. Levanyuk.

DMP: Carbon Nanotubes: Synthesis, Processing, and Characterization.

GMAG/DMP: Transition Metal Oxide Ferromagnetic Semiconductors. Ogale. GMAG/DMP: Phase Competition and Separation in Pervoskite Oxides. Wu.

GMAG/FIAP/DMP: Current Driven Magnetization Dynamics II. Beach. DBP/DPOLY: Single Molecule Biophysics: DNA and RNA. Nelson.

DBP/GSNP: Microorganism Motility. Bodenschatz.

DCOMP/DMP: Computational Nanoscience I. Roundy.

DMP: Nanoscale Thermal, Thermoelectric, and Mass Transport: Theory and Simulation. Heinze.

DMP: Wide Bandgap Semiconductors II. Wright.

afternoon

DCMP: Fluctuation and Relaxation near Jamming. Langer, Makse, Abate,

DCMP: Quantum Hall Effect in Graphene. Kim, Geim, Sharapov, de Heer. FIP: Scientists from Developing Countries: Is There an Effective Way to

Support Meaningful Research? Kofane, Ben Lakdar, de Brito Cruz, M'Passi-Mabiala.

DPOLY/DMP: Organic Electronics. Friend, Martin, Loo, Chabinyc, Lin. FIAP: Catalysis and Complexity: Ken Hass Memorial. Schneider, Wolverton, Carlsson, Davis.

DCOMP: Simulating Hydrogen Storage: From Current Challenges to Future Promises. Johnson, Tse, Zhao, Jena, Goddard.

GMAG: New Results in Geometrically Frustrated Magnets. Mendels, Moessner, Gardner, Schiffer, Lunkenheimer.

DBP: Methods in Nanobiotechnology. Roukes, Austin, Michl, Wiseman, Hla.

DCP: Physical Chemistry of Nanoscale Systems III. Leone, Xie. DCP: Promises and Challenges in Chemical Dynamics III. Kawasaki.

DCP/DBP: Spectroscopy of Biomolecules from Isolated Molecules to Cell Environment III. Baumgart, Ha.

DCMP: Atomic Tunneling, Films, Nanostructures. *Enss.* FIAP: Negative Refractive Index I. *Brueck*.

FIAP: Phase Transitions and Domains in Ferroelectric Nanostructures II. Gregg.

GMAG/DMP: Semiconductor Spin Injection and Detection. Crowell.

GMAG/DMP: Magnetic Nanopatterns. Chien.

GMAG/DMP/DCOMP: Magnetic Theory I / Spin Structures and Dynamics. Dobrovitski.

DPOLY: Particle Dynamics and Organization; Polymer Tethers and Interfacial Segregation. Smith.

DBP/DPOLY: Dynamics of Nucleic Acid-Protein Interaction: Single Molecule.

Wang, Wuite.
DCOMP: Novel Computational Algorithms I. Hu, Aspuru-Guzik.

DBP/GSNP: Molecular Machines and Motors. Flood, Goldman.

DMP/GSNP: Friction, Fracture, and Deformation I. Dickinson.

DMP: Thermal Transport and Thermoelectricity in Nanotubes and Graphene.

DMP: Superconductivity: Properties of Doped and Irradiated Magnesium Diboride and Related Compounds. Putti.

GOI/DCMP: Foundations of Quantum Theory. Hardy.

DAMOP: Vortices and Vortex Lattices in Fermi and Bose Superfluid Gases. Zwierlein.

DMP: Wide Bandgap Semiconductors III. Huang.

DCMP: Emerging Emergent Phenomena. Witten, Lolle, Barabási, Sadoulet.

Tuesday, 14 March

Nobel Prize Symposium. Hänsch, Hall, Glauber.

Special Prize Session. Su, Grobe.

DCMP: Quantum Criticality in Cuprates. Chamon, Tallon, Shibauchi, Lake, Broun.

DCMP: Coupled Superconducting Qubits. Shnirman, Martinis, Schuster, Plantenberg, Morpurgo.

DPOLY: Polymer Physics Prize. Leibler, Moeller, Fredrickson, Candau, Colby. DMP/FIAP: Advanced Materials for Solar Energy Utilization. Lewis, Kurtz, Yong, Moore, Carlson.

GSNP: Shear-Induced Patterns in Complex Fluids and Granular Matter. van Saarloos, Reichmann, Register, Davidovitch, Jaeger.

DCP: Focus Sessions: Physical Chemistry of Nanoscale Systems IV. Yang, Xia. DCP: Promises and Challenges in Chemical Dynamics IV. Shafer-Ray.

DCP/DBP: Spectroscopy of Biomolecules from Isolated Molecules to Cell Environment IV. Zwier, Hochstrasser, Mons.

FIAP: Negative Refractive Index II. Narimanov.

FIAP: Emerging Research Devices and Materials for Microelectronics Industry I. Vogel.

A bbreviations 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: Carbon Nanotubes: Electronic and Optical Properties I. Spataru.

GMAG/DMP: III-V Magnetic Semiconductors I. Poggio.

GMAG/DMP: Magnetic Nanoparticles I. Leslie-Pelecky.

GMAG/DMP/DCOMP: Magnetic Theory II: Transport and General. Yao. DBP: Trapping of Nanoscale Biological Objects. Cohen, Gratton.

DCOMP: Novel Computational Algorithms II. Bai, Baroni.

DPOLY: Microphysical Properties of Block Copolymer Aggregates I. Discher. DBP: Physical and Engineering Constraints on the Function of Biological Systems, Lezon, Doyle,

DPOLY/DMP: Electronic Transport in Organic Films. De Feyter, Charra.

DCOMP/DMP: Simulation of Complex Materials I. Wagner.

DMP/GMAG: Orbital/Charge Order in Complex Oxides. Ye.

DMP: Nanoscale Materials Physics of Phase Transitions I. Dawber.

DMP: Superconductivity: Carbon Alloying of Magnesium Diboride and Related Compounds. Wilke.

DCMP/DCOMP: Superconductivity: Theory and Computation I. Scalapino.

midday

GQI: Quantum Information, Concepts, and Computation. Blatt, Yamamoto, Raizen, Gisin, Whaley

DCMP: Spin Liquids in 2D Frustrated Quantum Magnets. Coldea, Alicea, Kanoda, Motrunich, Lee.

DCMP: Soft Interfaces. Quere, Zhang, Stebe, Hilgenfeldt, Gopal.

DCMP: Physics for Everyone. Dahlberg, Falco, Schwartz.

DCOMP: The Response of Extended Systems to Electrical and Magnetic Fields: Novel, Theoretical, and Computational Methods. Thonhauser, MacDonald, Cai, Umari, Ghosez.

DBP: Nanopore Biophysics. Kasianowicz, Dekker, Movileanu, Li, Aksimentiev.

GSNP: Jamming in Glasses, Grains, and Gels I. Maloney.

DCP: Frontiers in Computational Chemical Physics I. Lin, Angel.

DCP: Chemical and Spectroscopic Applications of Nonlinear Optics I. Eisenthal, Shultz.

FIAP: Hydrogen Storage II. Ahn.

FIAP: Emerging Research Devices and Materials for Microelectronics Industry II Coufal

DMP: Carbon Nanotubes: Electronic and Optical Properties II. Lienau, Chang.

GMAG/DMP: III–V Magnetic Semiconductors II. Burch.

DFD: Microfluidic Physics I. Paoletti.

GMAG/DMP: Nanoparticles and Nanocomposites. Wang.

DPOLY/DMP: Energetics and Transport in Conjugated Organics. Silva. DBP: Physical Aspects of Morphogenesis: Computational Approaches.

Brodland, Jiang. DCOMP/DMP: Simulation of Complex Materials II. Ogitsu.

DCOMP/DMP: Computational Nanoscience III. Zhang.

DMP/GSNP: Friction, Fracture, and Deformation II. Gnecco.

DMP: Single Molecule Conductance. Weber.

DMP: Nanoscale Materials Physics of Phase Transitions II. Albrecht.

DCMP: Superconductivity: Josephson Junctions and Pairing State Symmetry.

DMP: Materials for Quantum Computing II. Buhrman.

GSCCM/DCMP: Dynamic Compression. Hayes, Minich.

DAMOP: Strongly Interacting Fermi Gases and the BCS-BEC Crossover II. Regal.

DMP: Wide Bandgap Semiconductors IV. Qian.

DCMP: Depletion Forces in Vitro and out of Equilibrium. Snir, Lewis. DAMOP: Optical Frequency Clocks and Experimental Quantum Optics. Gill, Udem, Ye, Bergquist, Haroche.

DCMP: Exotic Ordering in Spinels. Croft, Horibe, Khomskii, Sushkov, Radaelli

DCMP: Electron-Doped High- T_c Superconductors. Dagan, Blumberg, Takahashi, Motoyama, Naito.

DMP/CSWP: Prize Symposium. Chelikowsky, Cao, Dai, Zettl.

FIAP: Microelectronics for Mid-Infrared Through Terahertz. Gmachl, Prober, Shaner, Tredicucci, Schmidt.

COM: Minorities in the Nanosciences. Mason, James, Noveron, Stokes.

DBP: New Methods and Algorithms for Biomolecular Modeling. Darve, Sagui, Thorpe, Tuckerman, Yang.
GSNP: Jamming in Glasses, Grains, and Gels II. Blair.

DCP: Frontiers in Computational Chemical Physics II. Reuter.

DCP: Chemical and Spectroscopic Applications of Nonlinear Optics II. Shen, Simpson, Morita.

DMP/DCMP: Magnetic Thin Films and Narrow Gap Semiconductors. Weitering. FIAP: Molecular-Scale Electronics II. Karna.

FIAP: Si, Ge, and SiGe Nanostructures. Ross, Kamins.

DPOLY: Dillon Medal Symposium. Urayama.

GMAG/DMP: III-V Magnetic Semiconductors III. Van Schilfgaarde.

DMP/GMAG: Multiferroics II: Hexagonal Systems. Fennie.

GMAG/FIAP/DMP: Magnetization Dynamics. Rasing.

DBP/DCMP: Single Molecule Biophysics I. Chu.

DPOLY: Microphysical Properties of Block Copolymer Aggregates II. Santore. DCOMP/DMP: Simulation of Complex Materials III. Blum.

GSNP: Novel Moving Boundary Problems. Krug, Kessler, Ebert, Goldstein, Karma. DCOMP/DCMP: Superconductivity: Theory and Computation II. Fabrizio.

DMP: Materials for Quantum Computing III. McDermott.

DMP: Dielectric, Ferroelectric, and Piezoelectric Oxides II. Venturini.

evening

DBP: Flexible Molecular Recognition: The New Paradigm. Matthews, Kern, Taylor, Jennings, Wang.

FPS: Intelligent Design: Its Impact and Responses to It. Gunn, Berman, Slakey,

Wednesday, 15 March

morning

DCMP: Topological Phases and Quantum Computing. Kitaev, Hermele, Freedman, Stern, Fendley.

DCMP: Nanoscale Crystals. Craig, Alivisatos, Drndic, Krauss.

DCMP: Insulating Cobaltates: Mottness on a Triangular Lattice. Gasparovic, Hasan, Zandbergen, Balicas, Imai.

DPOLY/DMP: Polymer Crystallization. Cheng, Hsiao, Ungar, Muthukumar, Granasy.

FIAP: Pake and AIP Industrial Physics Prizes. Duke, Semerjian, Palffy-Muhoray, Lubell, Edelstein.

DAMOP: Fermi Superfluid Gases: Nonequal Spin Polarization (FFLO State) and p-Wave Pairing. Son, Yip, Hulet, Diener, Sa de Melo.

DCOMP: Recent Advances in the Computation of Optical and Transport Properties of Nanostructures. Weissker, Bester, Gebauer, Sanvito, Pecchia.

DCP: Frontiers in Computational Chemical Physics III. Cui.

DCP: Aerosols, Clusters, Droplets: Physics and Chemistry of Nano-objects I: Helium Nanodroplets I. Drabbels, Tiggesbaumker.

DMP/DCMP: Alloy and Interface Composition. Hannon.

DCP: Ultrafast and Ultrahigh-Field Chemistry I: Strong-Field Phenomena. Jones, Yamanouchi.

FIAP: Hydrogen Storage III. Yildirim.

FIAP: Semiconductors for THz and IR I. Perera.

DMP: Carbon Nanotubes: Transport I. Strunk.

GMAG/DMP: Magnetic Vortices and Exchange Biased Thin Films. Roshchin. GMAG/DMP/DCOMP: Magnetic Theory III: Oxides and Phase Transitions. Schulthess.

DPOLY/DMP: Organic Photovoltaics. Inganas.

DBP/DFD: DNA and Protein Analysis with Micro- and Nano-Fluidics. Riehn, Hansen.

DBP: Physical Models of Ion Channel Function. Gillespie, Coalson.

DMP/DPOLY: Carbon Nanotubes: Composites and Applications. Baughman.

GSNP: Instabilities and Turbulence in Complex Fluids. Sureshkumar.

GSNP: Organization of Complex Networks. Mendes.

DMP: Nanoscale Fabrication, Assembly, and Semiconductor Nanowires. Misra. DMP: Superconductivity: Thin Films and Junctions, Magnesium Diboride and Related Compounds, Xi.

DCOMP/GSCCM/DMP: Simulations of Matter at Extreme Conditions I.

midday

DCMP: Électron Transport in Single Molecules. Tao, Yao, Flensberg, Wolkow,

DCMP: The Electronic Properties of Overdoped Cuprates: The Clean Gateway to High-T. Superconductivity. Hussey, Damascelli, Slezak, Taillefer, van der Marel.

FED: Physics Teacher Preparation at a Crisis: Innovative Programs Addressing a National Need. Heron, Marder, Stewart, Finkelstein, Hein.

GIMS: Keithley Award Session. Hellman, Jach, Fortune, Migliori.

DFD: Shedding Light on the Enigma of the Transition to Turbulence in Pipes and Other Shear Flows. Mullin, Henningson, Waleffe, Kerswell, Tumin, Eckhardt.

GMAG: Quantum Spin Dynamics in Molecular Nanomagnets. Waldmann, Chudnovsky, Sessoli, Harmon, Park.

GSNP/DBP: Physics of Transcriptional Regulatory Networks. You, Buchler, Li, Huang, Vazquez.

DFD/GSNP: Jets, Shocks, and Splashes. Xu, Lohse.

DCP: Frontiers in Computational Chemical Physics IV. Martinez.

DCP: Aerosols, Clusters, Droplets: Physics and Chemistry of Nano-objects II: Helium Nanodroplets II, Aerosols, and Miscellaneous. Signorell.

DCP: Ultrafast and Ultrahigh-Field Chemistry II: Quantum Control. Silberberg, Girard.

FIAP: Molecular-Scale Electronics III. Janes.

DMP: Carbon Nanotubes: Optoelectronics. Chen.

GMAG/DMP: Spin Interference and Spin Hall Effect. Sih.

GMAG/FIAP/DMP: Spin Transport in Metals. Garzon.

DBP/DCP: Protein Dynamics in Folding and Function. Mildvan, de Alba, Miller, Summers, Campbell, Hall, Pastor, Redfield.

DPOLY/DMP: Organic Interfaces. Rosei.

DMP/GSNP: Friction, Fracture, and Deformation III. Falk.

DCOMP/DCMP: Superconductivity: Theory and Computation (Mainly First Principles). Mazin.

DCOMP/GQI: Pathways to Practical Quantum Computing I. DiVincenzo. DMP: Dielectric, Ferroelectric, and Piezoelectric Oxides III. Dierolf.

afternoon

DCMP/DBP: Cytoskeletal Dynamics and Mechanics. Svitkina, Julicher, Gopinathan, Gardel, Storm.

DCMP: Fractional Quantum Hall Systems. Csathy, Gallais, Peterson, Kim, Schulze-Wischeler.

DCMP: Lateral Spin Transport. Ji, Bauer, Valenzuela, Otani.

DPOLY: Ionic, Dipolar, and H-bonding Polymers. Breedveld, Dormidontova, Pochan, Cremer, Prabhu.

FGSA/FIAP: Paths from Academics to Employment. Czujko, Silbernagel, Seiler, Stanton, Garg.

CSWP: US Women in Physics: An International Perspective. Michelman-Ribeiro, Whitten, Horton, Ong. Hodari.

DBP/FED/FPS: The Experimental and Theoretical Foundations of Evolution. Keymer, Deem, Fisher, Lenski, Shapiro.

DCP: Surfaces and Interfaces in Electronic Materials I. Wieckowski, Switzer. DCP: Aerosols, Clusters, Droplets: Physics and Chemistry of Nano-objects III: Molecular Clusters. Johnson

DCP: Ultrafast and Ultrahigh-Field Chemistry III: Ultrafast Processes. Schafer, Villeneuve, Matsumoto.

FIAP: Semiconductors for THz and IR II. Zhang.

DMP: Carbon Nanotubes: Transport II. Roche.

GMAG/DMP: Spin Hall Effect and Spin Transport. Engel.

DFD/DBP: Biological Hydrodynamics. Aranson.

GMAG/DMP: Biomagnetism and Exchange-Biased Thin Films. Hoffmann. GMAG/FIAP: Theory and Simulation for Information Storage Applications. Schrefl.

DBP/DPOLY: Counterion Dynamics in Charged Biopolymer Systems. Wong, Netz.

DBP: Biological Networks: Structure, Dynamics, and Function. El-Samad,

DCOMP/DMP: Computational Nanoscience V. Tangney.

DMP/GSNP: Friction, Fracture, and Deformation IV. Houston.

DMP: Optical and X-Ray Properties of Nanostructures. Vasiliev.

DMP: Nanoscale Conductance Theory I. Baranger.

DCOMP/GQI: Pathways to Practical Quantum Computing II. Laflamme.

DMP: Dielectric, Ferroelectric, and Piezoelectric Oxides IV. Streiffer. DCMP/GSCCM: Plasticity and Phase Transitions. Robinson, Lorenz.

DBP: Physics, Chemistry, and Biology of the Hydrophobic Effect. Li, Widom, Chandler, Truskett.

Perspectives on Our Energy Future. Dehmer.

Thursday, 16 March

morning

DCMP: Spin Liquids and Superconductivity near the Mott Transition. Lee, Schmalian, Tremblay, Mook, Bourges.

DCMP: Quantum Magnets in High Magnetic Fields. Broholm, Grenier, Zheludev, Hagiwara, Essler.

DCMP: Nanomechanical Architecture of Strained Thin Films. Prinz, Liu, Schmidt, Blick.

DPOLY: Lithography. Willson, Dammel, Nealey, Jones, Hinsberg.

FHP: Low-Temperature Physics, A Historical Perspective. Wheeler, Donnelly, Mever, Lee.

DCOMP: Strong Electronic Correlation in Solids: Applications of the LDA+U Method. Louie, Janotti, Lichtenstein, Kunes, Cococcioni.

FIAP: Nanoscale Pattern Generation and Lithography. Hector, Smith, Baglin, Kim, Russell.

DCP: Surfaces and Interfaces in Electronic Materials II. Buriak, Wang.

DCP: Aerosols, Clusters, Droplets: Physics and Chemistry of Nano-objects IV: Metal Clusters I. Duncan, Woeste.

DMP/DCMP: Electrochemical and Related Growth. Wang.

DBP: Physics and Imaging in Medicine. Amols, Soares, Baird, Gueye.

DMP: Carbon Nanotubes: Transport III. Ferrari.

GMAG/DMP: Semiconductor Spin Nanostructures for Quantum Computing.

DMP/GMAG: Metal-Insulator Transition and Electron Phonon Coupling in Perovskites. Alvarez.

GMAG/FIAP/DMP: Magnetic Tunneling I. Yang.

GSNP/DBP/DPOLY: Cytoskeletal Dynamics. Danuser.

DBP/DFD: Biological Hydrodynamics II. Groisman, Brenner.

DBP/DPOLY: Nonequilibrium Fluctuation in Biomolecules and Artificial Nanodevices. Astumian, Janko.

DPOLY: Mechanical Properties: Deformation, Rupture, and Failure. Marder.

DMP: Nanowire and Nanodot Quantum Devices. Doh.

DCMP: Superconducting Proximity Effect—S/N and S/F. Eschrig.

DCOMP/GQI/DAMOP: Pathways to Practical Quantum Computing III. Cirac. DCOMP/GSCCM/DMP: Simulations of Matter at Extreme Conditions II. Ashcroft.

DAMOP: Novel Phases in Low-Dimensional Quantum Gases. Porto, Ho.

DCMP: Quantum Hall Edges. Grayson, Yang, Rezayi, Roddaro, Papa. DCMP: Excitons in Single-Walled Carbon Nanotubes. Lanzani, Sheng, Zhao, Mirlin Reich

DCMP: Nonequilibrium Nano-oscillators. Cleland, Chan, Dykman, Vijayaraghavan, Clerk.

DAMOP: Dynamics and Nonequilibrium Phenomena in Optical Lattices. Batrouni, Polkovnikov, Weiss, Rigol, Minguzzi.

DMP: Surfaces and Interfaces of Correlated Oxides. Kawasaki, Ahn, Santamaria, Bozovic, Mannhart.

GSNP/DBP: Noise in Biological Systems. Cluzel, Tu, Levine, Setayeshgar, Sourjik.

DCOMP/DFD: Simulations Using Particles. Koplik, Cottet.

DCP: Surfaces and Interfaces in Electronic Materials III. Uosaki, Wei.

DCP: Aerosols, Clusters, Droplets: Physics and Chemistry of Nano-objects V: Metal Clusters II. Schooss, Cheshnovsky.

DMP/DCMP: Wetting and Hard-Soft Interfaces. Cicero.

DMP: Carbon Nanotubes: Transport IV. Gruner.

APS/AIP: The Changing Dynamics of Industrial Research as a Consequence of Global Trends. Taub, Stork, Durcan, Weinrib, Feist.

GMAG/DMP: Semiconductor Spin Dynamics: Optics. Hall.

DPOLY: Polymer Composites—Nanotubes and Nanoclays. Dhinojwala. DPOLY: Mechanical Properties: Microscale Deformation and Failure. Sue.

GSNP: Social Networks. Redner.

DMP: Optical Properties of Carbon Nanotubes and C60. Ma.

GQI/DCMP: Linear Optics Quantum Computation. Rudolph.

DMP: Dielectric, Ferroelectric, and Piezoelectric Oxides V. Warusawithana.

afternoon

DCMP: ARPES in High-T_c Superconductors. Dessau, Valla, Chubukov, Cuk, Ino. DCMP: Imaging Charge and Spin and Semiconductors. Steele, Komiyama, LeRoy, Aidala, Hasegawa,

DCMP: Topological Aspects of Electron Transport in Solids. Nagaosa, Haldane, Kane, Bernevig.

DPOLY: Carbon Nanotube Dispersions. Hobbie, Pasquali, Poulin, Windle, Winey.

FHP: A Century of Critical Phenomena. Levelt Sengers, Voronel, Ahlers, Fisher, Kadanoff.

FIAP: New Applications of Silicon in Photonics and Biomedicine. Manalis, Jalali, Lipson, Murphy, Vlasov.

DBP/DPOLY: Physics of Cell Elasticity, Interactions, and Tissue Formation. Riveline, Bruinsma, Janmey, Safran, Suresh.

GSNP/DFD: Nonlinear Electrokinetics. Rubinstein.

DCP: Surfaces and Interfaces in Electronic Materials IV. Penner, Goesele.

DCP: Aerosols, Clusters, Droplets: Physics and Chemistry of Nano-objects VI: Nanocatalysis, Supported Clusters. Heiz, Moseler.

DMP: Carbon Nanotubes: Electronic and Optical Properties III. Maruyama.

DMP/GMAG: Multiferroics IV. Loidl.

GMAG/DMP: Magnetic Nanoparticles II. Dvorak.

GMAG/DMP/DCOMP: Magnetic Theory IV: Ab Initio Studies. Stepanyuk.

DPOLY: Lithography. Soles, Jonas.

DBP: Biological Photophysics. Zhong, Venugopalan.

DPOLY/DBP: Biopolymers at Interfaces. Ober.

DMP: Optical Properties of Nanostructures of Si and GaAs. Chou, Dal Negro. DCOMP/GSCCM/DMP: Simulations of Matter at Extreme Conditions III. Streitz. DAMOP/GQI: Cold Atoms in Optical Lattices. Demler.

Friday, 17 March

morning

DCMP/DBP: Engineering Biomolecules and Circuits by Rational Design and Genetic Selection. Hwa, Guet, Goulian, Liao, Noireaux.

DCMP: Electrostatic Levitation and High-Energy X Rays. Rogers, Hyers, Goldman, Fadley, Lee.

GMAG: High TMR MgO Tunneling and Spin Momentum Transfer Materials, Physics, and Devices. Parkin, Yuasa, Fuchs, Huai, Sun.

FIAP: New Functionalities in Glasses and Nanomaterials. Chakravorty, Gopalan, Jain, Kieffer, Mazur,

DCOMP: Is the Hubbard/t-J Model a High-Temperature Superconductor? Pryadko, Putikka, Troyer, Ogata.

DCMP: Challenges and Issues in Nanowire Nanodevices. Friedman, Hashizume, Cobden, Aono.

DFD: General Fluid Dynamics. Barranco.

GMAG/DMP: Novel Ferromagnetic Semiconductors I. Saito.

GMAG/DMP: Ruddlesden-Popper Phase Manganites. Hayward.

GMAG/FIAP: Coupled Thin-Film Structures for Magnetic Recording. *Thiele*.

DBP: Physics of Physiological Systems. Ben-Jacob.

DBP/DPOLY: Noise and Fluctuation in Biological Systems. Van Oudenaarden, de Gennes.

DPOLY/DBP: Biopolymers I: Phase Transitions. Garcia, Onuchic.

DMP: Probing Novel Nanostructures. Folsch.

midday

DCMP: Strong Interaction Effects in Small Conductors. Petta, Matveev, Steinberg, Fiete, LeHur.

DCMP: Resonant Inelastic X-Ray Scattering in Complex Oxides. Kim, Hancock, Ishii, Ghiringhelli, Li.

DPOLY/DBP: Biopolymers. Vogel, Sheetz, Perkins, Greer, Horkay.

DBP: Synchrony and Complexity in Brain Activity and Function. Towle, Nadkarni, Schiff, Lehnertz, Zochowski.

DMP: Carbon Nanotubes: Double-Wall Nanotubes, Sheets, and Chains.

GMAG/DMP: Spin Dynamics in Quantum Dots. Abstreiter.

GMAG/FIAP: FePt Nanoparticles for Information Storage. Weller.

DBP/GSNP: Methods of Statistical Physics, Population Dynamics, and Epidemiology. Brockmann.