



Montreal Hosts the APS March Meeting

The American Physical Society heads north to Canada for its annual March meeting, held this year in cooperation with the Canadian Association of Physicists (CAP), at the Palais des Congrès de Montréal—the city's convention center—from Saturday, 20 March, through Friday, 26 March.

More than 5000 physicists are expected to attend the typically chock-full meeting, where researchers will present approximately 5500 papers at more than 90 invited and 550 contributed paper and poster sessions. The APS divisions, groups, and forums represented reflect the broad range of topics that will be explored. The divisions that are taking part in the meeting are those of condensed matter physics, materials physics, polymer physics, chemical physics, biological physics, fluid dynamics, laser science, computational physics, and atomic, molecular, and optical physics. Also participating are the society's topical groups on instrument and measurement science, magnetism and its applications, shock compression of condensed matter, and statistical and nonlinear physics, as well as the APS forums on industrial and applied physics (FIAP), physics and society, history of physics, international physics, education, and graduate student affairs.

In addition to the customary technical program that will fill most of the

busy hours of the meeting, APS has arranged several special sessions. Topics that will be addressed include research in the hydrogen economy and the impact of high-end computing on physics research.

Another special session will highlight talks by two of the three winners of the 2003 Nobel Prize in Physics—Alexei Abrikosov and Anthony Leggett. They shared the prize with Vitaly Ginzburg for “pioneering contributions to the theory of superconductors and superfluids” (see *PHYSICS TODAY*, December 2003, page 21).

Attendees who arrive on or before Sunday, 21 March, can enroll in a number of tutorials and workshops that are scheduled for the weekend before the meeting's official start on Monday, 22 March. Those who are interested in delving deeper into rheology and the dynamics of polymers and complex fluids can take the short course being offered by the division of polymer physics in two all-day sessions on Saturday and Sunday from 8:00 AM to 5:00 PM.

APS has also planned eight half-day tutorials for Sunday. The morning tutorials, scheduled from 8:30 AM to 12:30 PM, will address the dynamics of magnetotransport, computational cell biology, organic and inorganic semiconductor quantum dots, and the theory and applications of quantum information science. The afternoon tutorials (1:30–5:30 PM) will cover

spintronics, opportunities in biological physics, terahertz frequency spectroscopy at low temperatures, and Java programming using the Open Source Physics Library.

By popular demand, the APS Committee on the Status of Women in Physics (CSWP) is offering its second workshop on “Survival Skills for Successful Women Physicists.” This session is intended to offer career advice and instruction for women scientists in early to midcareer. The workshop will feature both a panel of women physicists who will speak on a variety of related topics and a professional trainer who will lead an interactive discussion of negotiating strategies. This session is scheduled for Sunday from 1:30 to 5:45 PM at the Queen Elizabeth Hotel in downtown Montreal. A reception, cosponsored with the Committee on Minorities in Physics and the Committee on Careers and Professional Development, will follow.

Another workshop offering information on career development for physicists is planned for Sunday from 3:00 to 6:00 PM. The location of this workshop, free for all meeting attendees, had not been announced as of press time.

APS will host the meeting welcome reception at the convention center on Monday, beginning at 6:30 PM. The reception follows the 5:15 PM awards ceremony, at which a number of the society's prizes, awards, and medals

will be bestowed. (See the accompanying story on page 94.)

Several more special events will round out the nontechnical side of the meeting. An example is a high-school physics teachers' day, a workshop produced by CAP with support from APS, that will be presented simultaneously in French and English from 8:30 AM to 5:00 PM on Monday at the Queen Elizabeth Hotel.

For those who want an early start on Tuesday, 23 March, a networking breakfast sponsored jointly by CSWP and FIAP will take place at the Queen Elizabeth Hotel from 7:00 to 9:00 AM. This gathering will feature an invited speaker and opportunities for infor-

mal discussion and networking.

Participants can join editors from *Physical Review B*, *Physical Review E*, and *Physical Review Letters* to exchange ideas in a panel discussion format on Tuesday, from 3:30 to 5:30 PM at the convention center.

Students attending the APS meeting are invited to an informal reception on Tuesday from 5:30 to 6:30 PM that will spotlight a physics trivia quiz with prizes. Students can also sign up for an opportunity to share lunch and conversation with an expert in selected topics of interest on Wednesday, 24 March, from 12:30 to 2:00 PM.

Marcel LeBlanc, professor emeri-

tus of physics at the University of Ottawa, will present his renowned Cryo-Magic science show at the convention center on Thursday, 25 March, from 5:30 to 6:30 PM.

An especially important part of the meeting is the exhibition show. Over three days, the latest in physics-related products, services, equipment, software, books, and more will be on display at the convention center. The show hours are Monday and Tuesday from 10:00 AM to 5:00 PM and Wednesday from 10:00 AM to 4:00 PM.

The complete meeting program is available on the Web at <http://www.aps.org/meet/MAR04>.

Judith Barker

Sessions With Invited Speakers

Monday, 22 March

morning

DCMP: Microwave-Induced Resistance Oscillation in 2D Electron Systems. *Zudov, Mani, Durst, Andreev, Willett.*
 DCMP/DAMOP: Degenerate Gases. *Hulet, Bruun, Altman, Zwerger.*
 FIP: Synchrotron Radiation Research in Developing Countries and International Scientific Cooperation. *Abashian, Brum, Toukan, Takehiko, Atkinson.*
 GIMS: Opportunities for Condensed Matter Research at National User Facilities. *Crow, Gibson, Herwig, Tiwari, Kreitzman.*
 FIAP/DMP: Molecular Electronics: Challenges for Computing and Sensing. *Kuekes, Kagan, Reed, Meyyappan, Seminario.*
 GMAG: Molecular Nanomagnets. *Hill, del Barco, Pederson, Tejada, Wernsdorfer.*
 DBP/DCMP: Mechanics of Self-Assembled Structures. *Rudnick, Powers, Schmidt, Phillips, Bausch.*
 DBP: Neutron Scattering and Other Studies of Phospholipids. *Katsaras, Root.*
 FIAP: Semiconductor IR and THz Devices and Applications I. *Capasso.*
 DMP: Transport in Carbon Nanotubes. *Kim, Egger.*
 GSNP: Granular Phenomena I: Gases, Pattern Formation, and Flows. *Shattuck.*
 DMP/FIAP: Lattice Dielectric Properties of Complex Oxides and Interfaces I. *Rignanese.*
 DMP/GMAG: Spin Transport and Spin Dynamics in Metal-Based Systems I. *Cros, Tataru.*
 GMAG/DMP: Magnetic Ordering. *Alvarez.*
 DMP/GSCCM: Earth and Planetary Materials I. *Desjarlais.*
 DPOLY/GSNP/DBP: Charge Effects on Biomolecules. *Pollack.*
 DMP: Growth and Evolution of Structures on Surfaces. *Evans.*
 DCP: Physics and Chemistry of the Atmosphere I. *Stanton, Shepson, Reid.*
 DCP: Dynamics at Gas-Solid and Gas-Liquid Interfaces I. *Ceyer.*
 DMP: Optical Properties of Nanostructures and Nanophotonics I. *Razeghi.*
 DCMP: Coherence in 2D Electron Gas. *Eisenstein, Joglekar, Sheng, Heiblum, Marquardt.*
 DCMP: New Effects in Novel Conductors. *Cicak, Kidd, Snow, Schaefer, Yang.*
 FPS: Nonproliferation and Counterproliferation: Two Means to the Same End. *Hafemeister, Levi, May, Younger, Zimmerman.*
 DPOLY/DBP: Ion-Containing Polymers and Membranes. *Seery, Chow, Chakraborty, Marques, Safinya.*
 FIAP/DMP: Electrical Contacts to Molecules. *Ghosh, Hsu, Kushmerick, Kahn.*
 DAMOP: Ultracold Molecules: Fundamental Science and Applications. *Doyle, DeMille, Julienne, Bethlem, Shlyapnikov.*
 GSNP: DLA and Beyond. *Bazant, Agam, Praud, Procaccia, Ball.*
 DBP: Cellular Biomechanics I: Cell Motility, Actin, Networks. *Charon, Lee.*
 DBP: Biomembranes and Ion Channels. *Cross.*
 FIAP: Semiconductor IR and THz Devices and Applications II. *Towe.*
 DCMP: HTSC: Magneto-Resistance, Hall Effect, and Magnetic Order. *Lake.*
 DCOMP/DMP: Simulations of Complex Materials I. *Mehl.*
 GSNP: Granular Phenomena II: Gases, Pattern Formation. *Duffy.*
 DMP/FIAP: Lattice Dielectric Properties of Complex Oxides and Interfaces. *Junquera.*
 DMP/GMAG: Spin Transport and Spin Dynamics in Metal-Based Systems II. *Chung.*
 GMAG/DMP/DCOMP: Magnetism and Structure I. *Yang.*
 GMAG/DMP: III-Mn-As FMS Structure: Mn Sites. *Sullivan.*
 DCOMP/DMP/GSCCM: Simulation of Matter at Extreme Conditions I. *Reed.*
 DPOLY: Multi-Scale Modeling of Polymers. *Kremer, Fredrickson.*
 DPOLY/GSNP/DBP: Charged Biomolecules in Complexes and on Surfaces. *Rondelez.*

FIAP/DMP: Mechanical Properties of Nanostructured Thin Films and Coatings I. *Wolf.*

DCP: Physics and Chemistry of the Atmosphere II. *Okumura, Barker, Lester.*

DCP: Dynamics at Gas-Solid and Gas-Liquid Interfaces II. *Tully, Wodtke.*

DMP: Optical Properties of Nanostructures and Nanophotonics II. *Bacher.*

FIAP: Ceramics. *Affatigato, Sayir.*

afternoon

DCMP: 2D MIT in Low Density Electron Gases. *Gershenson, Scalett, Kang, Lilly, Zhu.*

GMAG/DCMP: Spin Ice and Spin Liquid. *Ghosh, Gingras, Moessner, Gardner, Cava.*

DCMP: Competing States and Inhomogeneity in Transition Metal Oxides.

Bishop, Moreo, Souchkov, Egami, Uchida.

DMP: McGroddy, Adler, and Isakson Prize Session. *Pfeiffer, Pinczuk, Chien, Bass, Wolfe.*

FHP: The History of Physics in Canada: Some Highlights. *Rayner-Canham, Griffin, Stoicheff, Svensson.*

FED: Research at Predominantly Undergraduate Institutions. *Andreen, Collings, Silversmith, Galvez, Brandenberger.*

DBP/DCMP: Cutting Edge Techniques in Biological Physics. *Yeh, Austin, Mirkin, Grier, Durbin.*

DPOLY/GSNP/DBP: Polyelectrolytes and Other Charged Systems. *Netz.*

FIAP: Spectroscopy of Semiconductor Nanostructures. *Jagadish.*

DMP/FIAP: Novel and Complex Oxides I. *Ulrich, Solov'ev.*

DMP: Modeling and Simulations of Carbon Nanotubes. *Cheng.*

GMAG/DMP: Spin Transport and Spin Dynamics in Metal-Based Systems III. *Viret.*

GMAG/DMP: III-Mn-V FMS: Transport. *Zutic, Xiong.*

DAMOP: Quantum Phase Transitions of Ultracold Atoms I. *Bloch.*

Abbreviations preceding each entry denote the sponsoring division (d), committee (c), 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)
 GFB: Few-Body Systems and Multiparticle Dynamics (g)
 GIMS: Instrument and Measurement Science (g)
 GMAG: Magnetism and Its Applications (g)
 GSCCM: Shock Compression of Condensed Matter (g)
 GSNP: Statistical and Nonlinear Physics (g)

DCP: Physics and Chemistry of the Atmosphere III. *Tuck, Francisco, Cohen.*
 DCP: Dynamics at Gas–Solid and Gas–Liquid Interfaces III. *Pershan, Shultz.*
 DCOMP: Novel Computational Algorithms I. *Henkelman.*
 FIAP: Landmines, Lightning, Music, and Philosophy. *Altshuler, Rotondo.*

evening

DCMP: Criss-Cross: The Unity of Physics. *Baym, Price, Shenker, Hopfield, Jin.*

Tuesday, 23 March

morning

GMAG/DCMP: Spin-Momentum Transfer Physics: Recent Experimental Progress. *Ji, Pufall, Urazhdin, Mancoff, Ozyilmaz.*

DCMP: Quantum Computing I: Superconductivity. *Wellstood, Pashkin, Hakonen, Clerk, Stroud.*

DCMP: Novel Plutonium-Containing Materials. *Lander, Wong.*

DCMP: Mott Transition in Organics. *Kanoda, Wzietek, Lebed.*

DPOLY: Polymer Physics Prize. *Lodge, Schrag, Stepanek, Kent, Amis.*

FIAP: Complex Catalytic Materials. *Sohlberg, Reuter, Adams, Buttrey, Michaelides.*

FHP/FPS: The History of Physics in Industrial Laboratories. *Schmitt, Anderson, Fowler, Chayes.*

GSNP/DAMOP: Quantum Chaos. *Antonsen, Steck, Fishman, Blumel, Heller.*

DBP: Membranes and Bilayers. *Majewski, Lee.*

DMP: Wide Bandgap Semiconductors I. *Manfra.*

FIAP/DMP: Light Emission From Si. *Priolo.*

GIMS: Recent Advances in Scientific Instrumentation. *Agosta.*

DMP/FIAP: Novel and Complex Oxides II. *Sergienko.*

GSNP/DMP: Jamming: Mechanical and Structural Properties of Foams, Gels, and Colloids. *Pine, Dennin.*

DMP/GMAG: Magnetic Thin Films and Heterostructures. *Meyerheim.*

GMAG/DMP/DCOMP: Ferromagnetic Semiconductors. *Abrikosov.*

GMAG/DMP: Spin Manipulation/Dynamics I. *Beschoten.*

DAMOP: Quantum Phase Transitions of Ultracold Atoms II. *Hofstetter.*

DMP: Steps: Fluctuations and Effects. *Hannon.*

DCP: Physics and Chemistry of the Atmosphere IV. *Roberts.*

DCP: Dynamics at Gas–Solid and Gas–Liquid Interfaces IV. *Beck.*

APS: Nobel Prize Session. *Abrikosov, Leggett.*

BCS–BEC Crossover in Atomic Fermi Gases. *Regal, Hecker Denschlag, Ketterle.*

DCMP: Quantum Computing II: Semiconductors. *Das Sarma, Golding, Rogge, Shih.*

GMAG/DCMP: Ferromagnet Excitations. *Sooryakumar, Chubukov, Berger, Kirkpatrick, Cowburn.*

DPOLY: Networks and Complex Architectures. *Finkelmann, Urayama, Cohen, Vlassopoulos, Wu.*

DCOMP/FED: Open Source Software in Physics Education and Research. *Bauer, Trebst, Christian, Dubois, Sherwood.*

DCMP: Heavy Fermions and Quantum Critical Points. *Steglich, Si, Sachdev, Schofield, Paglione.*

DBP: Physics of Ion Interactions with Proteins. *Rasaiah, Coalson, Grubmuller, Roux, Jakobsson.*

DBP: Biochemical Networks I. *Tang, Ao.*

DMP: Wide Bandgap Semiconductors II. *Myers.*

GIMS/FIAP: MEMS/NEMS Science, Technology, Applications. *Houston.*

DMP/FIAP: Novel and Complex Oxides III: $\text{Na}_2\text{CoO}_2 \cdot \text{H}_2\text{O}$. *Takada.*

GSNP: Slow Dynamics in Frustrated Systems. *Das.*

DFD/GSNP: Turbulence. *Ecke.*

GSNP/DMP: Jamming: Mechanical Response of Disordered Systems. *Debrégeas, Rottler.*

GMAG/DMP: Manganites: Phase Separation. *Cheong, Tokura.*

GMAG/DMP: Spin Manipulation/Dynamics II. *Kato, Jiang.*

DCOMP/DMP/GSCCM: Simulations of Matter at Extreme Conditions II. *Rost.*

FIAP/DMP: Mechanical Properties of Nanostructured Thin Films and Coatings II. *Misra.*

DMP: Fundamental Challenges in Transport Properties of Nanostructures I. *McEuen.*

DCP: Physics and Chemistry of the Atmosphere V. *Reid, Abbatt.*

DCP: Dynamics at Gas–Solid and Gas–Liquid Interfaces V. *Kay, Minton.*

FIAP: Energy Harvesting: Materials and Phenomena. *Thonhauser, Shakouri.*

DCMP: Competing Order Parameters in Quantum Spin Two-Leg Ladders.

Blumberg, Tomic, Fujiwara, Grueninger, Troyer.

afternoon

DCMP: Decoherence and Irreversibility in Quantum Mechanics. *Levstein, Jacquod, Vanicek, Tomsovic, Zurek.*

DCMP: Sheets, Spouts, Jets: Small-Scale Structures. *Cohen, Zhang, Homsy, Delville, Quére.*

DPOLY: Dillon Medal Award Symposium. *Müller.*

FIAP/DBP: Development of Detectors/Sensors for Imaging Applications. *Tkaczyk, Saraf, Gregory, Street, Zhang.*

COM: Topics in Nanoscale and Cooperative Phenomena. *Salamanca-Riba, Ulloa, Azzouz, de Lozanne, Ravelo.*

APS: Special Prize Session. *Stern, Elings, Haegel, Stanley, Pretorius.*

DBP: From Biological to Artificial Membranes. *White, Martin, Desai.*

DBP: Pattern Formation and Collective Phenomena I. *Showalter, Nihongi.*

GIMS/FIAP: MEMS/NEMS Science, Technology, Applications. *Cleland.*

GSNP: Jamming: Granular Matter and Glasses. *Chakraborty, Reichman.*

DFD/GSNP: High Rayleigh Number Convection. *Lohse, Tong.*

DCMP: Quantum Critical and Non–Fermi Liquid Systems. *Singh.*

DMP/GMAG: Magnetic Dynamics. *Shin.*

GMAG/DMP: Manganites: Scattering and Optical Studies. *Daoud-Aladine.*

DMP: Earth and Planetary Materials II. *Alfé.*

DMP: Evolution of Remarkable Surface Structures. *Buatier de Mongeot.*

DCP: Nanoparticle Enhanced Spectroscopies I and the 2004 Earle K. Plyler Prize Session. *Van Duyne, Jackson, Talley.*

DCP: Dynamics at Gas–Solid and Gas–Liquid Interfaces VI. *Saykally, Tobias.*

DMP: Qubit Control and Decoherence I. *Poggio, Hamilton.*

DMP: Materials for Molecular Electronics I. *Zhitenev.*

FIAP: Hydrogen Storage I. *Meisner, Chou.*

evening

DCMP: Basic Research for the Hydrogen Economy. *Dresselhaus, Nørskov, Gasteiger, Gust, Graetzel.*

Wednesday, 24 March

morning

DCMP: Competing Order Parameters in Electron-Doped Cuprates. *Dai, Ando, Mang, Sonier, Alfi.*

DCMP: Generation of Spin and Current by Quantum Pumping. *Sharma, Andrei, Mucciolo, Watson, Tang.*

DPOLY: Crystallization. *Strobl, Muthukumar, Wunderlich, Rastogi, Meyer.*

FIAP: Perspectives on Hydrogen Storage. *Thomas, Jensen, Ceder, Yaghi, Chahine.*

DAMOP: Quantum Control: From Molecules to Condensed Matter. *Brumer, Shapiro, Boyd, Steel, Sipe.*

FHP/CSWP: Monolayers and Multilayers: Agnes Pockels and Katharine Blodgett. *Helm, Knobler, Gebbie, Schwartz.*

DBP: Biochemical Networks II. *Mackey.*

DMP: Wide Bandgap Semiconductors IV. *Jiang.*

DCMP: Infrared Studies of Superconductors I. *van der Marel.*

GIMS: Force Microscopy and Probes I. *Giessibl.*

DMP: Synthesis in Carbon Nanotubes. *Bernier, Strano.*

DMP/GSNP: Modeling Plasticity. *Seppälä.*

DMP: Multifunctional Oxides. *Hwang, Ignatiev.*

GMAG/DMP: Manganites: Orbital and Charge Ordering. *Varela.*

DMP: Nanostructures: Quantum Wires and Dots. *Zuo, Fujikawa.*

DCP: Nanoparticle Enhanced Spectroscopies II. *Meixner, Käll, Rothberg.*

DCP: Structure and Dynamics of Supercooled Liquids and Glasses I. *Alba-Simionesco, Ediger.*

DMP: Materials for Molecular Electronics II. *Braun.*

DAMOP/DCOMP/DMP: Computational Nanoscience I. *Sadeghpour.*

FIAP: MEMS/NEMS Applications I. *Thundat.*

DCMP: Electron Doped Superconductivity and Unconventional Density Waves. *Greene, Kusunose, Onose, Oganesyan, Fjaerestad.*

DCMP: Spintronics. *Sinova, Ouyang, van Driel, MacDonald, Molenkamp.*

DCOMP/GSNP: Packing and Flow in Granular Systems. *Clement, Silbert, Gollub, Landry, Meerson.*

DPOLY: Thermodynamics. *Leibler, Dormidontova, Hammouda, Almdal, Mayes.*

DMP: Grand Challenges in Nanomaterials. *Belcher, Bennett, Hull, Grutter, Côté.*

DCOMP: Correlated Electrons. *Ceperley, Reining, Kotliar, Gross, Tremblay.*

FGSA: Physics Careers Outside the University. *Ginsberg, Gronlund, Fitzgerald, Mooney, Cummings.*

DMP: Wide Bandgap Semiconductors V. *Zvanut.*

DMP: Raman Studies for Carbon Nanotubes. *Hartschuh.*

DCOMP/DMP: Simulation of Complex Materials III. *Montalenti.*

DMP/GSNP: Deformation, Dislocations. *Larson.*

DMP: Metamaterials for Negative Refraction and Related Phenomena I. *Padilla.*

GMAG/DMP: Magnetic Cobaltates and Spin Dependent Transport. *Palstra.*

GMAG: Quantum Magnets in 2D. *Vajk.*

FIAP: Interfacial Segregation on Atomic Scale: Experiment and Simulation. *Asta, Muller.*

DMP: Fundamental Challenges in Transport Properties of Nanostructures II. *Tosatti.*

DCP: Nanoparticle Enhanced Spectroscopies III. *Shalae, Oubre, Bouhelier.*

DCP: Structure and Dynamics of Supercooled Liquids and Glasses II. *Angell, Chandler.*

DMP: Materials for Molecular Electronics III. *Rosei.*

DAMOP/DCOMP/DMP: Computational Nanoscience II. *Shluger.*

FIAP: MEMS/NEMS Applications II. *Montemagno.*

afternoon

DCMP/DBP/DCOMP: DCMP/DBP/DCOMP Prize Session. *Lubensky, Nelson, Cardy, Abraham, Wolynes.*

DCMP: High- T_c Superconductors: Scattering. *Abbamonte, Keimer, Dordevic, Buyers.*

DCMP/DAMOP: Non-Abelian States in Quantum Systems. *Simon, Cooper, Schoutens, Vishveshwara.*

CSWP: Keeping Girls/Women in Science I. *Pavone, McNeil, Sonnert, Whitten, Simmons, Whitelegg.*
 FIAP/DPOLY: Laser Ablation of Biological and Polymeric Materials. *Srinivasan, Garrison, Lippert, Chrisey, Killeen.*
 DCOMP/GFB: Large-Scale Computational Approaches to Few-Body Physics Problems. *Schultz, Mitás, Lehner, McCurdy, Lepage.*
 DBP: Molecular Motors and the Physics of Cell Division. *Scholey, Sharp, Wilde, Jose.*
 DBP: Stretching of Proteins. *Cieplak, Thirumalai.*
 GIMS: Force Microscopy and Probes II. *Moreland.*
 DCOMP/DMP: Theory of Nanotubes and Carbon-Based Nanostructures I. *Raty.*
 DMP: Electronic Properties of Carbon Nanotubes. *Choi.*
 DMP/GSNP: Fundamentals of Friction. *Müser.*
 DMP: Metamaterials for Negative Refraction and Related Phenomena II. *Chui.*
 GMAG: Spin Injection I. *Jiang.*
 DCP: Nanoparticle Enhanced Spectroscopies IV. *Sandoghdar, Silberberg.*
 DCP: Structure and Dynamics of Supercooled Liquids and Glasses III. *Tarjus, Sastry.*
 DAMOP/DCOMP/DMP: Computational Nanoscience III. *Hofer.*
 APS: The Impact of High End Computing on Research in Physics. *Roskies, Orbach, Freeman.*
 DBP/DCMP: Mechanics of Biological Cells and Cytoskeleton Protein Networks. *Levine, Gardel, Ou-Yang, Hirst, Crocker.*
 DBP: Interacting Biological Agents in Experiment and Theory. *Levine, Couzin, Toner, Topaz, Erdmann.*

Thursday, 25 March

morning

DCMP: Quantum Properties of Thin Films and Nanowires. *Ugarte, Miller, Altman, Tsong, Bartynski.*
 DCMP/DAMOP: Electrons on Helium and BEC in Optical Lattices. *Dykman, Lea, Meyerovich, Morsch.*
 DCMP/DAMOP: Left-Handed Metamaterials. *Pendry, Smith, Soukoulis, Ozbay, Sridhar.*
 FIAP: Pake Prize: Future of Research in Industrial Labs. *White, Turlik, Hass, Duke, Senich.*
 DFD/GSNP: Experiments in Turbulence: 100 years of Ludwig Prandtl's Boundary Layer Theory. *Wallace, Meng, Lathrop, Bodenschatz.*
 DCOMP: Computational Materials Physics. *Ratner, Taylor, Srolovitz, Scheffler, Rappe.*
 DBP: Physics and Biology of Protein-DNA Interactions. *Lavery, Sengupta, Stormo, Kulkarni.*
 DBP: Structure and Dynamics of Proteins. *Rodriguez, Martinez.*
 DMP: Functionalization of Carbon Nanotubes. *de Pablo, Strano.*
 GSNP: Network Structure: Discovery and Modeling. *Redner.*
 DMP: Dynamics in Ice I. *Salmeron.*
 DMP/GMAG: Magnetic Nanostructures and Domains. *Xiao.*
 GMAG/DMP: Manganites: Lattice and Magnetic Structures. *Hennion.*
 GMAG/DMP: Spin Injection II. *Oestreich.*
 DPOLY: Defects in Polymers and Liquid Crystals. *Green.*
 DMP/DPOLY: Organic Materials Physics. *Kenkre.*
 DMP: Hydrogen and Physisorbed Materials I. *Zeppenfeld.*
 DCP: Nanoparticle Enhanced Spectroscopies V. *Martin.*
 DCP: Structure and Dynamics of Supercooled Liquids and Glasses IV. *Keyes, Berthier.*
 FIAP: Optoelectronics in Nanoscale Devices. *Misewich, Yang.*
 DCMP: Nanoelectromechanical Systems. *Blencowe, Bargatin, Minot, van der Zant, Schwab.*
 DCMP: New Phases of Heavy Fermion and Transitional Metal Material. *Harrison, Beach, v. Löhneysen, Hopkinson, Lonzarich.*
 DCMP: Casimir Forces in Condensed Matter Systems Followed by Ferromagnetic Semiconductors. *Garcia, Williams, Balibar, Hellman, Berci.*
 DPOLY: Dynamics. *Vanden Bout, Rey, Migler, Watanabe, Larson.*
 GIMS: Recent Advances in Nanomanufacturing Technologies. *Hoffbauer, Bonnell, Dai, Chou.*
 FIAP/GMAG: Ultimate Limits to Data Storage. *Himpel, McDaniel, Duerig, Wuttig, Gibson.*
 DCOMP: Grid Computing: Are We There Yet? *Koranda, Kalia, Reed, Avery, Seidel.*
 DBP: Physics in Physiology I. *Jung, Glass.*
 DMP: Carbon Nanotube Engineering. *Liu, Wang.*
 DCOMP/DMP: Simulation of Complex Materials IV. *Trushin.*
 GSNP: Network Structure: Robustness and Efficiency. *Toroczkai.*
 DMP/FIAP: Dynamics in Ice II. *Swanson.*
 DMP/GMAG: Magnetic Nanoparticles I. *Gai.*
 GMAG/DMP: Theory and Modeling of Magnetic Oxides. *Furukawa.*
 GMAG/DMP: Semiconductor Spin Transport. *Murakami.*
 DMP/DPOLY: Photophysics/Photonics of Organic and Polymeric Materials. *Samuel.*
 DMP: Films, Nanoclusters, and Self-Assembled Monolayers. *Liu.*
 DMP: Fundamental Challenges in Transport Properties of Nanostructures III. *Kotthaus.*

DCP: Multiscale Phenomena for Fluids and Solids I. *Miller, Needleman, Carter.*
 DCP: Structure and Dynamics of Supercooled Liquids and Glasses V. *Fisher, Goetze.*
 DCOMP: Novel Computational Algorithms II. *Norman.*

afternoon

DAMOP/DCMP: Gases Absorbed in Nanotube Bundles. *Johnson, Vilches, Gatica, Migone, Biljakovic.*
 DCMP: Novel Exotic Kondo States With Quantum Dots. *Kogan, Kogan, Rosch, Le Hur, Zaránd, Weis.*
 DCMP: Quasiparticles in Superconductors. *Zhou, Taillefer, Franz, Yazdani, Hirschfeld.*
 DBP/DCMP/GSNP: Structure and Dynamics of Complex Networks. *Newman, Barabási, Strogatz, Kauffman.*
 GSNP/DFD: Shear-Induced Transitions and Turbulence in Complex Fluids. *Olmsted, Morozov, Bates, Shaqfeh, Groisman.*
 DBP: The Theory of Hydrogen Transfer Reactions in Biological Systems. *Hynes, Hammes-Schiffer, Brooks III, Schwartz, Gao.*
 DBP: Structure and Dynamics of DNA. *Lyubchenko, Ha.*
 DBP: Physics in Physiology II. *Suki, Collins.*
 DMP: Structural and Mechanical Studies of Carbon Nanotube. *Li.*
 DCOMP/DMP: Simulation of Complex Materials IV. *Harrison.*
 DMP: Multiferroics I. *Wadhawan.*
 DMP/FIAP: Dynamics in Ice III. *Nilsson.*
 DMP/GMAG: Magnetic Nanoparticles II. *Kortright.*
 GMAG/DMP: Manganites: Transport and Field Effects. *Raveau.*
 GMAG/DMP: Quantum Dots. *Flatté, Vandersypen.*
 DMP/DPOLY: Charge Transport and Transistors. *Malliaras.*
 DMP: Hydrogen and Physisorbed Materials II. *Langreth.*
 DCP: Multiscale Phenomena for Fluids and Solids II. *Panagiotopoulos, Faller, Ladd.*
 DCP: Structure and Dynamics of Supercooled Liquids and Glasses VI. *Madden, Liu.*
 DMP: Asymmetrical Nanoparticles. *Alivisatos.*
 DCOMP: Computers in Physics Education. *Tinker, Landau.*
 FIAP: Front-End Materials and Processes for Scaled Si CMOS. *Demkov, Garfunkel.*
 DBP: Teaching Biological Physics. *Goldstein, Bruinsma, Howard, Vogel, Nelson.*
 DBP: Physical Modeling of DNA Microarrays. *Held, Laderman, Bekiranov, SantaLucia Jr, Naef.*

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morning

DCMP: Excitations in Strongly Correlated Materials I. *Devereaux, Kim, Chou, Hasan, Carnahan.*
 FIAP/DCMP/DAMOP: THz Devices, Science, and Technology. *Koehler, Kaindl, Ciulin, Hu, Shur.*
 DCMP: Magnetic Resonance Force Microscopy. *Marohn, Sidles, Hammel.*
 DCMP: NMR in Nanostructures. *Machida, Tifrea.*
 DPOLY: Thin Films and Interfaces. *Genzer, Green, Szeleifer, Krishnamoorti, Jones.*
 FIAP/DCOMP: Grid Computing and Complex Scientific Problems. *Schopf, Kot, Koster, Burr, Hollebeek.*
 DBP: Biomolecules in Solution. *Scheraga, Goddard.*
 DBP: Organismal Biomechanics. *Wang, Julicher.*
 DCOMP/DMP: Theory of Nanotubes and Carbon-Based Nanostructures II. *Miyamoto.*
 DMP: Multiferroics II. *Aeppli.*
 DFD/GSNP: Interface Driven and Nanoscale Flows. *Gad-el-Hak.*
 DMP/GMAG: Magnetic Nanoparticles III. *Martin.*
 GMAG/DMP: Nuclear Spin and 2DEG. *Strand.*
 DMP/DPOLY: Charge Transport and Spintronics. *Vardeny.*
 DCP: Multiscale Phenomena for Fluids and Solids III. *Dupuy, Öttinger, Kaxiras.*
 DMP: Quantum Computing IV: Semiconductors. *Lyon.*
 DCMP: Excitations in Strongly Correlated Materials II. *Ong, Lee, Gedik, Bozovic, Demsar.*
 DCMP: RF Dynamics of Nanoelectronic and Nanomechanical Systems. *Lehnert, Schmidt, Spietz, Knobel, Kiselev.*
 DCMP: MgB₂ and Other Superconductivity. *Bonn, Dahm, Gurevich, Lobb, Koshelev.*
 DCOMP: Towards a Deeper Understanding of Spin Glasses. *Nordblad, Young, Katzgraber, Moore, Hartmann.*
 DBP: New Developments in Understanding Bacterial Chemotaxis. *Cluzel, Tu, Othmer, Khan, Gestwicki.*
 DBP: Novel Surface-Based Techniques for Biomolecules and Biomolecular Thin Films. *Johannsmann, Frank.*
 DBP: Materials Physics in Biology. *Malkin.*
 DBP: Molecular Biology and Computation. *Hwa, Weiss.*
 DCOMP/DMP: Theory of Nanotubes and Carbon-Based Nanostructures III. *Snow.*
 DCP: Multiscale Phenomena for Fluids and Solids IV. *Graham, Wagner, Van der Ven.*