

# MINNEAPOLIS WILL HOST THE APS MARCH MEETING



The American Physical Society will hold its largest meeting of the year at the Minneapolis Convention Center from 20 to 24 March with some special events to be presented on the preceding weekend.

Typically, about 5,000 papers are presented at the APS March meeting, packed into 90 invited-paper and 550 contributed-paper sessions. This year, the session topics will reflect the interests of the APS units participating in the meeting: the divisions of condensed matter, materials physics, polymer physics, chemical physics, biological physics, fluid dynamics, laser science, and computational physics; the topical groups on instrument and measurement science, magnetism and its applications, shock compression of condensed matter, statistical and nonlinear physics; and the forums on education, history of physics, industrial and applied physics, international physics, and physics and society. As usual, there will be numerous sessions on such topics as superconductivity, semiconductors, surfaces and thin films, magnetism, and organic materials. But an unusual feature of this year's program, says program chair Richard Webb of the University of Maryland, will be the exceptionally large number of sessions dealing with polymers, DNA, and nanotubes.

Expanding a trend begun several years ago, some divisions and topical groups have organized a total of over 30 focus sessions in which both invited and contributed papers on a given topic will be combined in one session. The topics will include the physics of high-density magnetic recording, spectroscopy at high magnetic fields, modern optical techniques in materials science, protein dynamics, molecular-scale electronics, magnetoresistive oxides, phase transitions in ice, biological and biomimetic materials, and tribology.

This year, APS and the forum on

industrial and applied physics are introducing a new "technology of the year" series; each year the series will feature industrial applications of physics relevant to one or more industries of the host city. For the first series, APS, working with 3M Corp as a key industry, has organized four sessions around the topic of polymer physics. Another innovation set for the upcoming meeting is a lunch program designed to pair students in small groups with experts in selected fields on Thursday, 23 March, from 12:30 to 2 pm. Students will have a chance to sign up to eat lunch and confer with the expert of their choice on Monday, 20 March, at 1 pm.

One highlight of the meeting will be a minisymposium entitled "The Nanotechnology Initiative 2000: An Introductory Glimpse," to be held on Wednesday, 22 March, from 5:30 to 7 pm in Ballroom B. At press time, President Clinton was expected to announce a nanotechnology initiative to develop new sources of quantum electronics for the next century. The speakers at the minisymposium will be Thomas Weber of the National Science Foundation; Robert Dynes of the University of California, San Diego; Patricia Dehmer of the US Department of Energy; and Evelyn Hu of the University of California, Santa Barbara.

On the weekend before the start of the regular meeting program, the division of high polymer physics will sponsor a short course on adhesion and other issues in polymer thin films and coatings. The course will be held on Saturday, 18 March, and the following day, from 8 am to 5 pm on each day. In addition, APS has organized eight half-day tutorials for Sunday to provide attendees with a deeper background in the following topics: cellular automata simulations with Mathematica, high-temperature superconducting power applications, physics of

optical communications, biological fluorescence imaging, high performance in numerical computations on RISC workstations and parallel systems, silicon quantum dots, advanced magnetic resonance technologies, and the changing roles of researchers in industrial and applied physics.

On Sunday evening from 6:30 to 9:30 pm, APS will offer a career workshop to provide insight on career choices in physics. Topics will include resume preparation, interviewing skills, networking, clarifying expectations, and job search skills.

The regular meeting sessions are scheduled to begin at 8 am on Monday. That evening, from 5:15 to 6:15 pm, APS will present prizes and awards for distinguished contributions to a total of 20 individuals (see the awards story on page 69 of this issue). The awards ceremony will be followed immediately by the APS welcome reception, which will run through 7:30 pm in Ballroom A.

Individuals seeking jobs and institutions seeking new hires will want to visit the employment center maintained for APS by the American Institute of Physics. It will be open from 1:30 to 5 pm on Monday, from 9 am to 5 pm on Tuesday and Wednesday, and from 9 am to 1 pm on Thursday.

Many attendees are expected to flock to the APS show in Exhibit Hall 1 throughout the week. There they will have a chance to look over a wide variety of physics-related products and services, such as laser and optical component equipment, test and measurement equipment, scientific software, and spectroscopy equipment. They will also be able to browse through new books and examine physics-related periodicals. The show hours are 10 am to 5 pm on Tuesday and Wednesday, and from 10 am to 4 pm on Thursday.

On Monday, for the energetic in the crowd, APS is sponsoring its third

annual “Run for Health.” Participants are to gather at 6:15 am at the convention center so they can be bused to the Hubert Humphrey Metrodome for

a five-kilometer race. Runners must preregister and pay a \$25 entry fee.

The convention center is linked to the Hilton Hotel (the meeting head-

quarters) and other nearby hotels by an extensive system of glass-enclosed skyways—an alternative to walking in the brisk Minnesotan spring air.

## Sessions with Invited Speakers

### Monday, 20 March

#### morning

DCMP: Impurity States in High- $T_c$  Superconductors. *Davis, Yazdani, de Lozanne, Balatsky, Flatté.*  
 DCMP: Electrical and Optical Excitations in Pi-Conjugated Materials. *Baldo, Sirringhaus, Wohlgenannt, Mazumdar, Shinar.*  
 FIAP: Beyond Silicon. *Chuang, Peercy, Chen, Seabaugh, Likharev.*  
 DCMP: DNA and Molecular Conductance. *Barton, Braun, Fink, Ratner, Porath.*  
 GIMS: MEMS Measurements and Instrumentation Techniques. *Webb, Bishop, Naughton, Hellman.*  
 DCMP: Complex Structures of Self-Organized Quantum Dots. *Legally, Luo, Warburton, Skolnick, Jesson.*  
 DPOLY: Filled Polymer Systems I. *Schweizer, Krishnamoorti, Balazs.*  
 DMP: Fullerenes. *Dorn, Prassides, Schöber.*  
 DCMP: Superconductivity: Mesoscopic Superconductor. *Vinokur.*  
 DCP: Molecular-Scale Electronics: Individual Molecular-Scale Devices I. *Reed, Di Ventra, Alivisatos.*  
 DCP: Multidimensional Spectroscopies I. *Fayer, Berg, Loring, Miller, Albrecht.*  
 DMP: Laser Applications in Materials Physics I: Laser-Materials Interactions. *Dickinson, Poate.*  
 DMP: Ferroelectrics: Phase Transitions, Properties and Applications I. *Levy.*  
 GMAG: Magnetic Structure. *Anders.*  
 DMP: Magnetic Nanostructures and Heterostructures I: Ferromagnetic Semiconductors. *Young.*  
 DMP: CMR I: Charge/Orbital Ordering. *Khomskii, Liu.*  
 DMP: Characterization of Artificial Structures. *Ponce.*  
 DCMP: Liquid Crystals I. *Johnson.*  
 DCP: Experimental and Theoretical Frontiers in Molecular Quantum Dynamics: Complex Systems I. *Sension, Hammes-Schiffer, Mukamel.*  
 DCMP: Quasicrystals. *Bolliger.*  
 DCMP: The Vortex Phase Diagram. *Marcenat, Kwok, Gammel, Tesanovic, Soibel.*  
 DCMP: Degenerate Quantum Gases. *Jin, Feder, Hau, Ho, Bigelow.*  
 DBP: Biological Physics Prize Symposium. *Hansma, Shao, Fernandez, Giaever.*  
 DCMP: Colloidal Crystals and Glasses. *Kegel, Maret, Cheng, Gast, Weeks.*  
 FIAP: Physicists at Start-Ups. *Glass, Hesselink, Chang, Duck, Spitzer.*  
 FED: Information Technology: Increasing Access to Physics. *Gardner, Kalia.*  
 FIP: International Cooperation in Physics: Opportunities and Obstacles. *Schuller, Vary, Cisneros, Pines, Munoz.*  
 DPOLY: Reversibly Associating Polymers: Applications to Synthetic Biopolymers. *Rubinstein, Weitz, Greer, Vlassopoulos, Prud'homme.*  
 DMP/FIAP: Materials Theory for Industrial Problems I: Electronic and Structural. *Bloechl, Wolvert.*  
 DMP: Nanotubes and Related Materials: Growth & Characterization I. *Smalley, Crespi.*  
 DCMP: Penetration Depth. *Prozorov.*  
 DCP: Molecular-Scale Electronics: Individual Molecular-Scale Devices II. *Datta, Michl, Hamers.*  
 DCP: Multidimensional Spectroscopies II. *Bax, Piryatinski, Wright, Hamm.*  
 DMP: Laser Applications in Materials Physics II: Film Growth. *Norton, Zhu.*  
 DCMP: Heavy Fermions I. *Sarrao.*  
 GMAG: Novel Magnetic Measurement Methods. *Rippard.*  
 DMP: Magnetic Nanostructures and Heterostructures II: Spin Transport. *Katine, Baxter.*  
 DMP: CMR II: Hall Effect/Transport. *Lyanda-Geller.*  
 DMP: Nanoparticles and Nanoparticle Systems I: Structural Properties. *Meldrum.*  
 DCP: Experimental and Theoretical Frontiers in Molecular Quantum Dynamics: Theory I. *Tully, Heller.*  
 GIMS: High Magnetic Field NMR in Condensed Matter. *Gibbs, Clark.*  
 DMP: Multiscale Modeling of Materials I. *Schwarz.*

#### afternoon

DCMP: Photonic Bandgap Materials. *Vos, Noda, Lin, Chan, Zakhidov.*  
 DBP: Frontiers in Magnetic Resonance Imaging. *Schenck, Pelc, Feenan, Ugurbil.*  
 DCMP: Cytoskeleton of the Cell: Self-Assembled Structures and Interactions. *Janmey, Wong, Dogterom, Kas, Tang.*  
 DFD: Computation in Fluids, Biological and Granular Systems. *Bizon,*

*Wang, Pohorille, Shelley, Li.*  
 GIMS: Measurement Technology for Astronomical and Space-Based Experiments. *Duncan, Fugate, Feldman, McLeod.*  
 DCMP: Spin-Current-Induced Magnetization Reversal. *Myers, Tsoi, Berger, Bazaliy.*  
 DMP/FIAP: Materials Theory for Industrial Problems II: Chemical. *Fredrickson, Sohlberg.*  
 DMP: Nanotubes and Related Materials: Growth & Characterization II. *Achiba, Tsui.*  
 DCMP/DMP: Superconductivity: Vortex Phase Diagram I. *Nishizaki, Kierfeld.*  
 DBP: Modeling Protein Structure. *Dill, Hecht.*  
 DCP: Molecular-Scale Electronics: Transport and Wiring for Molecular-Scale Electronics. *Yaliraki, Joachim, Dekker.*  
 DCP: Multidimensional Spectroscopies III. *Bauder, Freed, Warren.*  
 DCOMP: Computational Condensed Matter Physics. *Wang.*  
 DMP: Surfaces, Interfaces, and the Growth of Thin Films I: Surface Reconstruction and Homoepitaxy. *Yang.*  
 DMP: Organic Electronic Materials and Devices I: Transistors and Other Devices. *Crone, Jackson.*  
 GMAG: Domain Dynamics. *Pokrovsky.*  
 DMP: Multiscale Phenomena in Smart Materials and Martensites I: Experimental Investigations. *Shapiro, Klemradt.*  
 DMP: Magnetic Nanostructures and Heterostructures III: Multilayers. *Qiu, Cyrille.*  
 DMP: CMR III: Jahn-Teller Effects. *Popović, Faeth.*  
 DMP: Nanoparticles and Nanoparticle Systems II: Electric Properties. *Harman.*  
 DCP: Experimental and Theoretical Frontiers in Molecular Quantum Dynamics: Theory II. *Miller, Makri, Coker.*

### Tuesday, 21 March

#### morning

DCMP: Role of Nodal Quasiparticles in High- $T_c$  Superconductors. *Johnson, Kaminski, Ino, Mason, Ong.*  
 DCMP: Optical Properties of Surfaces and Interfaces. *Mantese, Esser, Schmidt, Ebert, Sipe.*  
 DBP: What Physics Can Do for Biology and What Biology Can Do for Physics. *Frauenfelder, Leibler, Libchaber, Chu.*  
 DPOLY: Ford Prize Session. *Thomas, Richter, Lohse, Graessley, Fetters.*  
 FPS: Physics and the Law. *Manka, Sheridan, Poulter, Lustig.*  
 DCMP: Electron Interaction Phenomena in Quantum Dots. *Tarucha, Brodsky, Reimann, Folk, Sachrajda.*  
 DMP: Tribology I: Mechanics & Dynamics of Sliding and Adhesive Contacts. *Kim, Fretigny.*  
 DMP: Nanotubes and Related Materials: Theory I. *Buongiorno Nardelli.*  
 DCMP: Superconductivity Josephson Junctions Properties and Devices. *Decca.*  
 DBP: Protein Dynamics in Folding and Function I: Theory. *Wolynes.*  
 DCP: Molecular-Scale Electronics: Architectures for Molecular-Scale Electronics. *Kuekes, Lent, Korotkov.*  
 DCP: Multidimensional Spectroscopies IV. *Jonas, Tominaga, Tanimura, Dantus, Tokmakoff.*  
 DMP: Surfaces, Interfaces, and the Growth of Thin Films II: Adsorption and Growth. *Meyer zu Heringdorf, Wang.*  
 DMP: Fundamentals of Semiconductors/Thin Dielectric Structures I. *Aymerich, Edwards.*  
 DMP: Ferroelectrics: Phase Transitions, Properties and Applications II. *Bedzyk.*  
 DMP: Organic Electronic Materials and Devices II: Light-Emitting Diodes. *Bruetting, Popović.*  
 GMAG: Spin Dynamics. *Fishman, Pines.*  
 GSNP: Nonequilibrium Quantum Phenomena. *Sridhar, Whelan.*  
 DMP: Magnetic Nanostructures and Heterostructures IV: Exchange Biasing. *Felcher.*  
 DMP: Nanoparticles and Nanoparticle Systems III: Formation and Self-Organization. *Stroud.*  
 DCMP: Superfluid Helium and Critical Phenomena I. *Dohm, Zassenhaus.*  
 DCP: Experimental and Theoretical Frontiers in Quantum Molecular Dynamics: Complex Systems II. *Scherer, Voth, Kohler.*  
 DMP: Multiscale Modeling of Materials II. *Daw, Greene.*  
 DCOMP: Computational Materials Science. *Sutton, Bernstein, Voter, Vashishta, Bulatov, Falk.*  
 DCMP: Spectroscopy of Many-Body Processes. *Ell, Shahbazy, Dodge, Bolton, Birkedal.*  
 DBP: Brownian Ratchets: The Experimental Approach. *Feringa,*



*Hirokawa, Tsong, van Oudenaarden, Austin.*

DCMP: Control and Order of Copolymer Films for Lithography. *Mansky, Harrison.*  
GSNP, DFD: Front Dynamics and Pattern Formation. *Ebert, Ben-Jacob, Levine, Huber, van Saarloos.*  
FED: Related Advances in Computers, Education, and Physics. *Bothun, Rice, Landau.*  
DCMP: Physics of the SiC-SiO<sub>2</sub> Interface. *Pantelides, Saks, Duscher.*  
FPS: Voodoo Science. *Achenbach, Lykken, Shermer, Park.*  
FIAP: Optical Characterization and Devices I. *Bergman.*  
DCMP/DMP: Nanotubes: Invited Theory II. *Baughman, Washburn, Kim.*  
DBP: Protein Dynamics in Folding and Function II: Experiment and Computations. *Nienhaus.*  
DCP: Molecular-Scale Electronics: Alternative Schemes to Molecular-Scale Electronics. *Hughes, Katz, Petroff.*  
DCP: Structure and Dynamics at Liquid and Solid Interfaces: Advances in Interfacial Probes. *Somorjai, Pershan, Flynn.*  
DMP: Surfaces, Interfaces, and the Growth of Thin Films III: 2D Island Growth. *Zielasek, Hannon.*  
DCMP: Metal-Insulator Transition. *Yoon.*  
DMP: Organic Electronic Materials and Devices III: Materials Characterization. *Curioni, Hanna.*  
DMP: Multiscale Phenomena in Smart Materials and Martensites II: Theory and Modeling. *Shenoy.*  
DMP: CMR V: Strain/Isotope Effects. *Belova.*  
DCMP: Quantum Dot Quantum Computation. *Snider.*  
DCP: Experimental and Theoretical Frontiers in Molecular Quantum Dynamics: Vibrational Dynamics. *Dlott, Reid.*  
DCMP: Glasses and Amorphous Materials II. *Russina.*

## afternoon

CSWP: Nicholson Medal Symposium. *Dresselhaus, Ajzenberg-Selove.*  
DCMP: NMR Studies of Unconventional Superconductors. *Slichter, Wortis, Halperin, Pennington, Kitaoka.*  
DPOLY: Dillon Medal Symposium. *Brughardt.*  
CSWP: How to Succeed in Physics: Pitfalls and Strategies. *Dresselhaus, Alper, Chandrasekhar, Chang, Birgeneau.*  
DCMP: Buckley and McGroddy Prize Session. *Dolan, Fulton, Kastner, Maple.*  
GMAG: High Density Magnetic Recording Media. *Lambeth, van Ek, Weller, Smith, Schultz.*  
GIMS: Joseph F. Keithley Award Session. *Quate, Wickramasinghe, Rugar, Mandelis.*  
DCMP: Magnetization Dynamics in Mn<sub>12</sub> and Fe<sub>8</sub> Molecular Crystals. *Sarachik, Fort, Garg, Wernsdorfer, Kent.*  
DCOMP: Computational Nanostructures. *Louie, Shumway, Wingreen, Baranger, Moll.*  
FIAP/DPOLY: The Polymer Physics of Adhesion. *Owen, Tirrell, Ginzburg, Russell, Mitra.*  
DMP: Nanotubes and Related Materials: Electronic Properties. *Wu.*  
DCMP: Tunneling Spectroscopy of Superconductors. *Greene, Deutscher, Rainer.*  
DCMP: Superconductivity: Vortex Phase Diagram II. *Geshkenbein, O'Brien.*  
DBP: Neurobiological Physics and Nonlinear Phenomena. *Falcke.*  
DCP: Molecular-Scale Electronics: Spectroscopy for Molecular-Scale Electronics. *Weiss, Nesbitt, Naaman.*  
DCP: Structure and Dynamics at Liquid and Solid Interfaces: Electron Dynamics at Interfaces. *Höfer, Harris, Lewis, Nozik, Waldeck.*  
DMP: Surfaces, Interfaces, and the Growth of Thin Films IV: 3D Island Growth. *Ross.*  
DMP: Fundamentals of Semiconductors/Thin Dielectric Structures II. *Hong, Campbell.*  
DCMP: Strongly Correlated Electron Systems—Dynamical Properties. *Si.*  
DMP: Organic Electronic Materials and Devices IV: Injection and Transport. *Schon, Scher.*  
GMAG: Exchange Coupling and Superlattices. *Orozco.*  
DMP: CMR VI: Layered Manganites. *Mitchell.*  
DCMP: Mesoscopies II. *Rego.*  
DCP: Experimental and Theoretical Frontiers in Molecular Quantum Dynamics: Electronic Dynamics. *Nitzan, Laubereau, Schwartz.*

## Wednesday, 22 March

### morning

FIAP/DPOLY: PEM Fuel Cells I. *Wilson, Zawodzinski, Perahia, Ross.*  
DCMP: Two-Dimensional Electrons in High Landau Levels. *Cooper, Rezaei, Du, Fradkin, Jungwirth.*  
DBP: Noise-Enhanced Ordering and Synchronization in Biology and Physics I. *Rulkov, Schimansky-Geier.*  
DCMP: Unusual Rayleigh–Bernard Convection. *Schatz, Bodenschatz, Werner, Ahlers, Riecke.*  
DCOMP: PC Clusters for Computational Science Theory and Practice. *Sterling, Stevens, Orginos, Turner, Warren.*

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

CSWP: Status of Women in Physics (c)  
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)  
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 (t)  
GMAG: Magnetism and Its Applications (t)  
GSNP: Statistical and Nonlinear Physics (t)

DCMP: Ultrahigh Resolution Spectroscopy. *Yoo, Levine, Miller, Liu, Argyle.*  
DPOLY: Pressure Effects on Polymers I. *Watkins, Balsara, Paulaitis, Wignall.*  
DMP: Tribology II: Energy Dissipation & Sliding Mechanisms. *Burns.*  
DMP: Nanotubes and Related Materials: Transport I. *Reulet.*  
DCMP: Josephson Junction Arrays. *Lobb.*  
DCP: Nanocrystals from Scaling Laws to Applications: Nanocrystal Scaling Laws I. *Bawendi, McEuen, Blick.*  
DCP: Structure and Dynamics at Liquid and Solid Interfaces: Ultrafast Dynamics. *Wolf, Saalfrank, Gao.*  
DCMP: Granular Materials I. *Verbist.*  
DMP: Surfaces, Interfaces, and the Growth of Thin Films V: Surface and Growth Dynamics. *Kandel, Hashizume.*  
DMP: Ferroelectrics: Phase Transitions, Properties and Applications III. *Steinhauer.*  
DMP: Organic Electronic Materials and Devices V: Spectroscopy and Photophysics. *Osterbacka.*  
GMAG/FIAP: Physics of High-Density Magnetic Recording: Theory. *Safonov.*  
DMP: CMR VII: Magnetic Polarons/Spin Dynamics. *Nagaev, Fernandez-Baca.*  
DCMP: Quantum Dots: Spectroscopy. *Gammon.*  
DMP: Dynamic Deformation and Fracture I: Fracture I. *Rosakis.*  
DCMP: Helium Films. *Manousakis.*  
DCMP: Thin Film and Nanoscale Growth and Synthesis. *Zhang.*  
DMP: Materials Theory: High Pressure I. *Tse.*  
DCMP: Charge Stripes in Oxide Superconductors. *Hunt, Uchida, Zhou, Venkatesan.*  
DCMP: Magnetism in V<sub>2</sub>O<sub>3</sub> and CuGeO<sub>3</sub> and Defects in Ferroelectrics. *Sawatzky, Bao, Kiryukhin, Poykko.*  
DCMP: Quantum Hall Antiferromagnetism and Probes of the 2D Electron Gas. *Demler, Brey, Ezawa, Weis, Finkelstein.*  
DBP: Noise and Synchronization in Biological and Medical Systems. *Kurths, Tass, Neiman, Longtin, White.*  
FIAP: Molecular and Materials Approaches to Applied Tribology. *Didziulis, Salmeron, Mate, Gui, Granick.*  
DCMP: Spin Dependent Tunneling Junction and Excitonic Insulators. *Gallagher, Levy, Fert, Balents, Zhitomirsky.*  
DMP, DCMP: Onsager, Isakson, and Adler Prize Session. *Kosterlitz, Thouless, Richards, Batlogg.*  
GIMS: The Skeptical Inquirer on the New Paranatural Paradigm. *Kurtz, Nickell, Stenger, Scott.*  
DMP/FIAP: Group IV Semiconductor Alloys: Materials, Processes & Devices. *Osten, Mooney.*  
DMP/DCMP: Superconductivity: Vortex Dynamics I. *Kunchur.*  
DMP/DBP: Biological/Biomimetic Materials I: Model Membranes. *Leckband.*  
DCP: Nanocrystals from Scaling Laws to Applications: One-Dimensional Nanostructures II. *Lieber, Wang.*  
DCP: Structure and Dynamics of Liquid and Solid Interfaces: Nonequilibrium and Single Molecule Effects at Surfaces. *Polanyi, Osgood, Brus, Lee.*  
DCOMP: Quantum Computing I. *Imamoglu, Averin.*  
GMAG/FIAP: Physics of High-Density Magnetic Recording: Experiment. *Dahlberg.*  
DCMP: Nanostructures I. *Sheng.*  
DCMP: Surface and Interface Structures I. *Zajonz.*

DMP: Materials Theory: High Pressure II. *McMahan*.

## afternoon

DCMP: C-Axis Coupling in High- $T_c$  Superconductors and Resonant Inelastic X-Ray Scattering in Insulating Oxides. *Latyshev, Bernhard, Ioffe, Abbamonte, Hill*.  
FIAP/DPOLY: PEM Fuel Cells II. *Barbir, Larson*.  
FHP: Twenty Years of the Quantum Hall Effect/George Pake Prize. *Starr, Fowler, von Klitzing, Stormer, Halperin*.  
GMAG: New Phenomena in Exotic Magnetic Materials. *Young, Tallon, van der Laan, Morton*.  
GSPN: Econophysics. *Takayasu, Zhang, Amaral, Rosenow, Bouchaud*.  
DCMP: Collective Phenomena in Low-Density Electronic Systems. *Lonzarich, Aeppli, Munkata, Beschoten, Goodrich*.  
DCMP: Dynamics of Charge Transfer at Surfaces. *Kleyn, Kasemo, Gadzuk, Marston, Nordlander*.  
DCOMP: Friction at the Atomic Scale. *Robbins, Hammerberg, Gellman, Harrison*.  
DCMP/DMP: Superconductivity: Mechanisms. *Zaanan*.  
DCMP: Superconductivity: Vortex Phase Diagram III. *de la Cruz, Klein*.  
DMP/DBP: Biological/Biomimetic Materials II: Characterization and Properties. *Urry*.  
DCP: Nanocrystals from Scaling Laws to Applications III. *Seeman, Nie, Heath*.  
DCP: Structure and Dynamics of Liquid and Solid Interfaces: Liquid Interfaces I. *Shen, Richmond*.  
DCOMP: Quantum Computing II. *Hammel, Yablonovitch, Yamaguchi*.  
DCMP: Wide Bandgap Semiconductors I: Growth. *Tamargo*.  
DCMP/DMP: Superconductivity: Grain Boundaries. *Gurevich*.  
DMP: Dynamic Deformation and Fracture II: Fracture II. *Abraham*.  
GIMS: Heat Capacity Measurements in High Magnetic Fields. *Movshovich, Phillips*.  
DMP: High-Pressure Theory and Experiment:  $H_2$  and  $H_2O$ . *Kohanoff*.

## Thursday, 23 March

### morning

DCMP: Dissipation and the 2D Superconductor-Insulator Transition, and Vision. *Kapitulnik, Markovic, Spivak, Butts, Thornber*.  
FIAP/DPOLY: Polymer Structure and Dynamics at Interfaces: Molecules to Device Applications. *Chaikin, Curro, Rafailovich, Bruno, Yarusso*.  
DCMP: Physics at or Near 1/2 and 1/4 Filling of the Lowest Landau Levels. *Gramila, Willett, Pan, Park, Shankar*.  
DMP: Modeling and Characterization of Microstructure in Thin Films. *Frost, Rickman, Battaille, Adams, Brown*.  
DCMP: Geometrically Frustrated Magnets. *Ramirez, Gaulin, Tsui, Moessner, Lee*.  
DCOMP: Computational Physics across Disciplines. *Micheletti, Cieplak, Kirkpatrick, Fontana, Glotzer*.  
FIAP: Optical Characterization and Devices II. *Downer*.  
DMP: Nanotubes and Related Materials: Doped Systems. *Claye*.  
DBP: Non-Markov Models of Biophysical Phenomena. *Stanley, Dewey*.  
DCP: Nanocrystals from Scaling Laws to Applications IV: Oxide Nanoparticles. *Graetzel, Banfield, Lian*.  
DCP: Structure and Dynamics of Liquid and Solid Interfaces: Liquid Interfaces II. *Wirth, Nathanson*.  
DCMP: Wide Bandgap Semiconductors II: Defects I. *Furdyna*.  
DMP: Ferroelectrics: Phase Transitions, Properties and Applications IV. *Cohen*.  
DMP: Materials Theory: Magnetic Properties and Phenomena I. *Berker*.  
DMP: Dynamic Deformation and Fracture III: Microstructure and Atomistics. *Larson*.  
GIMS: Detectors, Sensors & Transducers. *Mück*.  
DMP: High Pressure: Primarily Experimental I. *Hausermann*.  
DCMP: Neutron, ARPES and Raman Studies of Cuprates. *Norman, Keimer, Morr, Wakimoto, Abanov*.  
FIAP: Materials Advances for Chemical Sensing Applications. *Ghosh, Cavicchi, Grate, Lloyd Spetz, Remillard*.  
DBP: Ionic Channels: Natural Nanotubes. *Eisenberg, Nonner, Coalson, von Klitzing*.  
DCMP: Nano-Magnetism. *Bonet, Russek, Back, Koch, Wirth*.  
GSPN, DFD: Stress Propagation, Failure and Flow in Granular Materials. *Menon, Behringer, Kudrolli, Narayan, Hunt*.  
DCMP: Spin Glasses and Spin-Gap Systems. *Wood, Joh, Vincent, Mila, Cabra*.  
DCMP: Phase Transitions in Quantum Systems. *Sachdev, Troyer, Sandvik, Chandrasekharan, Huse*.  
DCOMP: Electronic Correlation Effects in Materials. *Martin, Georges, Lichtenstein, Jarrell, Zhang*.  
DCMP: Metals: Electronic Structure & Spectroscopic Properties. *Burns*.  
DMP: Nanotubes and Related Materials: Functionalization & Gas Absorption. *Haddon*.  
DCMP/DMP: Critical Phenomena. *Reichhardt, Teitel*.  
DMP/DCMP: Superconducting Materials: Bulk and Film. *Veal*.

DBP: Measuring and Controlling Cardiac Electrophysiology. *Wikswa, Roth*.  
DCP: Nanocrystals from Scaling Laws to Applications: Transport and Spectroscopy of Nanocrystal Based Materials. *Greenham, Klimov, Hartland*.  
DCMP: Superconductivity: Vortex Dynamics II. *Andre*.  
DCMP: Wide Bandgap Semiconductors III: Defects II. *Glaser*.  
DCMP: Strongly Correlated Electrons Systems: Magnetic and Transport Properties. *Rosch*.  
GMAG/DCMP: Thermodynamic Magnetic Properties: Theory and Experiment. *Jaime*.  
DCMP: Nanowires II. *Takayanagi*.  
DMP: High Pressure: Primarily Experimental II. *Anderson, Rigg*.

## afternoon

DCOMP: Calculation of Electronic Excitations. *Reining, van Gisbergen, Shirley, Yabana, Chelikowsky*.  
FIAP/DPOLY: Technology and Wealth Generation in Digital Time. *Gordan, Friedman, Greenhalgh, Dabek, Duke, Sommer*.  
DCMP: Activated Escape Processes in Physics and Biology: New Insights. *Gabrielse, Golding, Roy, Bialek, Rousseau*.  
DCMP: STM Imaging of Transition Metal Oxides. *Mydosh, Kawai, Matzdorf, Pan, Kivelson*.  
DCMP: Critical Behavior in Disordered Quantum Systems. *Young, Damle, Parcollet, Dobrosavljevic*.  
DPOLY: Proteins and Polymers with Random Disorder. *Chakraborty, Pande, Saven, Shakhnovich, Grosberg*.  
FIAP: Terahertz/Optoelectronic Devices. *Kempa*.  
DMP: Nanotubes and Related Materials: Spectroscopy. *Bende*.  
DBP: Modeling Cardiac Electrophysiology and Other Nonlinear Phenomena. *Pertsov, Karma*.  
DCP: Nanocrystals from Scaling Laws to Applications: Theory of Nanostructures. *Parrinello, Landman, Efros, Bryant*.  
DCOMP: Advances in Computational Electronic Structure. *Mannstadt*.  
DCMP: Wide Bandgap Semiconductors IV: Electrical & Rare Earth. *Mellock*.  
DCMP: Semiconductors VIII: Magnetic Properties and Magnetic Semiconductors. *Kikkawa*.  
DMP: Phase Transitions in Ice I. *Wilen*.  
DMP: Materials Theory: Magnetic Properties and Phenomena II. *Katnselson*.  
DMP: Dynamic Deformation and Fracture IV: Dislocation Statistics. *Zaiser*.  
GIMS: Spectroscopy in High Magnetic Fields. *van Loosdrecht, Brunel*.  
DMP: High Pressure: Primarily Experimental III. *Eremets*.  
COM: Committee on Minorities Session. *Stith*.

## Friday, 24 March

### morning

DCMP: Electronic and Magnetic Properties of Ruthenates. *Cava, Sigrist, Bergemann, Hill, Braden*.  
DCMP: Ferroelectric Films Followed by Ice. *Scott, Chen, Krishnan, Saykally, Shukla*.  
DBP: Biophysics of Prey Localization and Neuronal Timing. *Hopfield, Kempter, Brownell, van Hemmen, Russell*.  
DCMP: Granular Materials: Jamming and Shaking. *Liu, Trappe, Aranson, Shinbrot, Bhattacharya*.  
DPOLY: Semicrystalline Polymers: New Perspectives on an Old Problem. *Kaji, Cheng, Rutledge, Marand*.  
DCMP: Transport in Superconductors. *Cieplak*.  
DCMP/DMP: Superconductivity: Flux Pinning. *Puig*.  
DBP: Optical Spectroscopy and Imaging of Biological Tissue. *Yodh*.  
DCMP: Wide Bandgap Semiconductors V: Theory. *Chow*.  
DMP: Phase Transitions in Ice II. *Kay*.  
GMAG: Spin Glasses. *Hukushima*.  
GSPN: Statistical Mechanics: General. *Duplantier*.  
DMP: Materials Theory: Magnetic Properties and Phenomena III. *Staunton*.  
DCMP: Ultracondensed Matter at High Pressures. *Silvera, Hemley, Neaton, Chau*.  
DCMP: Phase Separation in Manganites. *Uehara, Rajeswari, Kimura, Heffner, Ogale*.  
DCMP: Lasing in Disordered Media. *Lagendijk, Cao, Frolov, Jiang*.  
FIAP: Metamaterials. *Walser, Yablonovitch, Lakhtakia, Black, Ziolkowski*.  
DMP: Combinatorial Materials Science. *Engstrom*.  
DCMP: Organics and Borocarbides. *Brown*.  
DCMP: Wide Bandgap Semiconductors VI: Quantum Wells & Interfaces. *Johnson*.  
DMP: Materials Theory: Magnetic Properties and Phenomena IV. *Arrott*.  
DCMP: Microcavities and Photonic Crystals. *Reinecke, Busch*.  
DCMP: Classical Fluids and Thermodynamics. *Backhaus*. ■