

APS MEETS THIS MARCH IN KANSAS CITY



Over 5000 physicists are expected to converge on Kansas City next month to attend the American Physical Society's March meeting. If the notoriously full schedule permits, they may also enjoy an evening of contemporary jazz or throw politically correct diets to the wind to sample the steaks in the city's restaurants. The five-day meeting will officially start on Monday, 17 March (with related events set for the preceding weekend), and will be held at the Kansas City Convention Center.

The APS divisions participating in the meeting are those of biological physics, chemical physics, computational physics, condensed matter physics, fluid dynamics, high polymer physics, laser science and materials physics. Also participating are the topical groups on instrument and measurement science, magnetism and its applications, and statistical and nonlinear physics, as well as the forums on education, the history of physics, industrial and applied physics, international physics and physics and society, plus the committee on minorities in physics and the committee on the status of women in physics.

Attendees who arrive on or before Sunday, 16 March, can enroll in one of eight half-day tutorials that APS has arranged for that day. The topics are statistical design and analysis of experiments; Bose-Einstein condensation in dilute atomic gases: how and why; stochastic resonance in biology and biomedicine: how to find it in your own system; industrial and applied physics; analog signal recovery using digital signal processing; magnetic and magneto-transport properties of thin films and superlattices; the Global Positioning System as a research tool; and conducting and semiconducting polymers: science and technology. The division of high polymer physics is also sponsoring a short course on 15-16 March dealing with structure and motion in synthetic and biological polymers: the power of NMR. Details about these tutorials and courses, and about all other aspects of the meeting, are available on the World Wide Web at <http://www.aps.org>.

The meeting program, as usual, is bursting with large numbers of parallel sessions on a huge range of topics. Among them are magnetoresistive ox-

ides, fullerenes and carbon nanotubes, wide-bandgap semiconductors, intelligent materials and systems, entanglement effects in polymer processing, chemical physics of nanoparticles and nanostructures, surfaces and interfaces of quasicrystals and molecular motors and stochastic resonance. Besides these specialized sessions, there will be many of more general interest, including a session on frontiers of physics, history sessions commemorating 100 years of electrons and the 50th anniversary of the transistor, a session featuring four raconteurs telling anecdotes based on their writings, and a panel discussion on industry-university interactions.

One of the more engaging aspects of the program is the use of "focused sessions." Instead of a standard invited symposium, only one or two invited speakers are selected on a given topic, and the rest of the session consists of contributed papers on the same subject, thereby more narrowly focusing the thrust of the session. There will be sessions of this type in chemical physics, biological physics, laser science, magnetism, instrument and

measurement science, materials physics and condensed matter.

To help reduce the number of parallel sessions in the meeting, APS has scheduled evening poster sessions on Monday at 7:30 pm and Tuesday at 5:30 pm. Few, if any, other events conflict, and refreshments will be served.

The APS Exhibit will provide attendees with a chance to shop for new equipment for the laboratory or new references for the bookshelf. The show, to be held in Exhibit Hall D of the convention center's Bartle Hall, will be open on Tuesday from 10 am to 7 pm, on Wednesday from 9 am to 5 pm and on Thursday from 9 am to 3 pm.

The American Institute of Physics and APS will run a job center in Bartle Hall on Monday through Wednesday from 9 am to 5 pm and on Thursday from 9 am to 12 noon, with preregistration on Sunday, 16 March, from 4

to 6 pm. AIP is also organizing two employment workshops, to be held on Sunday from 1 to 4 pm and again from 6 to 9 pm.

The welcoming reception will take place on Monday at 6:30 pm, immediately following the awards ceremony at 5:30 pm. During the ceremony, APS will honor ten individuals with various prizes, lectureships, medals and awards.

The Oliver E. Buckley Prize will go to **James Langer**, a professor of physics at the University of California, Santa Barbara, for his "contributions to the theory of the kinetics of phase transitions particularly as applied to nucleation and dendritic growth." **Jerry Tersoff**, a research staff member at IBM's Thomas J. Watson Research Center will receive the Davison-Germer Prize for "insightful, creative theoretical descriptions of surface

phenomenology; particularly of crystal growth dynamics, surface structures and their probes." The High Polymer Physics Prize will be presented to **Frank Bates**, the Distinguished McKnight University Professor in the departments of chemical engineering and materials science at the University of Minnesota. He is being cited for "outstanding contributions to the physics of polymer-polymer phase behavior and the self assembly of block copolymers."

The Irving Langmuir Prize will go to **Jack H. Freed**, a professor of chemistry at Cornell University. He is being honored for "his development of new magnetic resonance methods and theory, including computational algorithms for the stochastic Liouville equation, time-domain ESR [electron spin resonance] methods for the study of molecular dynamics in liquids, applications of ESR to surface science

Sessions with Invited Speakers

Monday, 17 March

morning

Pseudo gap in high temperature superconductivity. *Shen, Stojkovic, Timusk, Loram, Julien.*

Quantum Hall edges. *Ernst, Scot, Ford, Geller, Freed.*

Wide gap nitrides. *Nakamura, Rapcewicz, Moustakas, Johnson, Tsen.*

X-ray microbeam applications. *Cargill III, MacDowell, Yun, Ade, Kirz.*

Atomistic studies of surface chemical reactions I. *Sibener, Wintterlin, Richard.*

New physics in magnetic resonance spectroscopy I. *Frydman, Conradi, Jameson.*

Defects in Si, Si-Ge, and related oxides. *Hsu.*

Neutron diffraction and related studies. *Radaelli.*

Silica wave guides and fibers. *Margulis.*

Laser ablation and low-energy beam-assisted film growth I. *Greene, Cima.*

Nucleation & crystallization: Theory & complex fluids. *Wu, Palberg.*

Morphology. *Stein.*

CuO₂ ladders. *Batlogg, Eccleston, Akemitsu, Rice, White.*

Non-dissipative Coulomb drag in mesoscopic systems. *Rojo, Gramila, Bonsager, Littlewood, Vignale.*

Novel scanning probes for electronic structure. *Ashoori, Eriksson, Yoo.*

New developments in diffusion limited aggregation. *Mandelbrot, Pietronero, Halsey, Grier, Hastings.*

Role of hydrogen and deuterium in silicon device processing. *Lyding, Cartier, Jackson, Chabal, Lucovsky.*

Atomistic studies of surface chemical reactions II. *Polanyi, Kummel, Gross.*

Coherent control and dynamical control in molecular solids I. *Barbara, Schwartz, Harris, Skinner.*

Critical currents—defects. *Suenaga.*

Superconducting properties (LTS). *Marinescu.*

Highly correlated metals: Heavy fermions—Experiment. *Nakotte.*

Phonony II. *Kiselev.*

Hyperfine interactions. *Takano.*

Highly swollen phases: From simple amphiphiles to DNA. *Roux, Mortensen, Golubovic, Podgornik, Strey.*

Wide-bandgap semiconductors I: Growth and characterization. *Den-Baars.*

Ultrathin magnetic films. *Himpfel.*

Laser-ablation and low energy beam-assisted film growth II. *Geoghegan.*

Nucleation & crystallization: Inorganic films and solids. *Besenbacher, Ganz.*

Nanoscale tribology II. *Agrait.*

Crystallization. *Balta-Calleja, Lotz.*

Glasses & transport. *Bussac.*

X-ray holography. *Faigel, Gog.*

afternoon

Resonant neutron scattering. *Keimer, Zhang, Scalapino, Levin, Chakravarty.*

Chiral Luttinger liquids FQHE edges. *Wen, Chang, Fisher.*

Non-linear optical processes in semiconductors. *Awschalom, Bar-Ad, Cundiff, Hulin, Wegener.*

Current themes in electron optical instrumentation. *Pennycook, Muller, Scheinfein, Haider, Tromp.*

Frontiers of physics. *Diehl, Richardson, Birge, Halas, Murray.*

New physics in magnetic resonance spectroscopy. *Freed, Pennington, Wu.*

Coherent dynamics and optical control in molecular solids II. *Apkarian, Fleming, Coalson.*

Highly correlated metals: Kondo lattice. *Zawadowski, Jarrell.*

Membranes and lipids. *Huang.*

Scattering. *Chu.*

New phase in double layer systems. *Zheng, Pellegrini.*

Tuesday, 18 March

morning

Vortex dynamics. *Vinokur, Kapitulnik, Giamarchi, Bhattacharya, Zimanyi.*

Quantum Hall effect—quantum fermions. *Jain, Maan, Coleridge, Willett, Simon.*

Noise and microstructure. *Seidler, Israeloff, Weissman, Abkemeier, Lust.*

Civic science: The mission and the motivation. *Schuller, Greenler, McGowan.*

Industry—university interactions. *Sumney, Golding, Penz, Anderson, Schneider.*

Chemical physics of nanoparticles and nanostructures I. *Brus, Williams, Samuelson.*

Vibrational dephasing and relaxation in liquids and solids I. *Ovchinnikov, Berg, Dlott, Berne.*

Highly correlated metals: Mixed valence compounds. *Schlesinger.*

Giant magnetoresistance. *Moodera, Lofland.*

Biological physics and beyond with atomic force microscopy and laser tweezers. *Bustamante, Thomson, Allen, Henderson, Lee.*

Wide-bandgap semiconductors II: Theory of GaN and nitride. *Wright.*

Magnetic reversal mechanisms. *Wernsdorfer.*

Laser-ablation and low-energy beam-assisted film growth III. *Venkatesan.*

Semiconductors thin film & multilayers I. *Mueller.*

Novel thermoelectrics and quantum confinement. *Broido.*

Novel scattering techniques. *Ruocco, Alp.*

Ford Prize symposium. *Bates, Fredrickson, Tirrell, Almdal, Cohen.*

Davison-Germer Prize symposium: Stress mediated nanostructures. *Tersoff, Teichert, Jesson.*

Phase transitions in vortex matter. *Welp, Schilling, Khaykovich, Lopez, Doyle.*

The 50th anniversary of the transistor. *Seitz, Ross, Riordan, Kilby.*

Nonlinear dynamics of continuum systems. *Brenner, Fineberg, Huber, Putterman.*

Pake Prize symposium: Entrepreneurial physics. *Warburton, Scifres, Childs, Elings.*

and the discovery of nuclear spin waves in spin-polarized H atoms."

Robert H. Kraichnan, a consultant to the complex systems group and the Center for Nonlinear Studies at Los Alamos National Laboratory, will receive the Lars Onsager Prize. The citation praises "his deep contributions and sustained leadership in the field of turbulence theory," and goes on to say that "his quantitative predictions of the inverse cascade in two-dimensional turbulence, his treatment of passive scalar transport, and his direct interaction approximation are landmark achievements." **Donald Ray Scifres**, the chief executive officer of Spectra Diode Lasers in San Jose, California, will be given the George E. Pake Prize for "outstanding research in high power semiconductor lasers, the transformation of these research results into commercial products, and extraordi-

nary accomplishment via founding and leading a successful and growing new business based on these products."

Roger E. Miller and **David J. Nesbitt** will share the Earl K. Plyler Prize. According to the citation, the prize is being awarded "in recognition of their spectroscopic investigations that have elucidated the structure and eigenstate-resolved dynamics of weakly bound complexes." They have each pioneered a novel method of high resolution infrared spectroscopy and have used their respective methods in a series of insightful investigations of a wide range of chemically important complexes." Miller is the John B. Carroll Professor of Chemistry at the University of North Carolina at Chapel Hill, and Nesbitt is a fellow at the Joint Institute for Laboratory Astrophysics in Boulder, Colorado, and a professor of chemistry and biochemistry at the

University of Colorado at Boulder.

John D. Joannopoulos, the Francis Wright Davis Professor of Physics at MIT has been chosen to receive the David Adler Lectureship for his "pioneering use of modern computational tools for the calculation of the electronic, vibrational and optical properties of amorphous, crystalline and photonic bandgap materials, including their surfaces and defects, and for his excellence in lecturing, writing and training students in these areas." He will give his award lecture, entitled "The Nature of the Wet Electron." **Nitash Balsara**, an associate professor of chemical engineering at Polytechnic University in Brooklyn, New York, will take home the John H. Dillon Medal for "innovative and illuminating optical and neutron experiments to probe the state of order in multi-component polymer systems."

Chemical physics of nanoparticles and nanostructures II. *Sailor, Ebbsen, McEuen*.
Vibrational dephasing and relaxation in liquids and solids II. *Fayer, Hochstrasser, Hynes*.
Spin excitations. *Mason*.
Theory II: Ladder compounds. *Greven*.
Random networks and chalcogenide glasses. *Plischke*.
Magnetism of clusters and nanoparticles. *Reddy, Kodama*.
Wide-bandgap semiconductors III: Defects, impurities and heterostructures in III-nitrides. *Wessels*.
Magnetoresistive oxides I: Structure. *Satpathy*.
Interlayer magnetic coupling. *Stoeffer*.
Novel thermoelectric materials I: Skutterudites and quantum effects. *Sales*.
X-ray scattering and x-ray holography. *Tegze, Abernathy*.
Thin film dynamics. *Dutcher*.

afternoon

Quantum Hall effects in weak fields. *Yang, Liu, Jiang*.
Recent advances in density functional theory. *Mauri, Engel, Anisimov, Nordström*.
Advanced semiconductor characterization, instrumentation and techniques. *Wright, Amato, Pollack, Salnick, Wetsel*.
Vibrational dephasing and relaxation in liquids and solids III. *Egerov, Loring, Stratt*.
Critical currents: Grain boundaries. *Hilgenkamp*.
Highly correlated metals: Low D theory. *Kiryukhin*.
Liquid crystals in confined geometries. *Wu, Ho*.
Optical properties: Dynamics and surface effects. *Zollner*.
Coercivity in rare-earth magnets: Theory and practice. *Hadjipanayis, Hirotsawa*.
Probing electron dynamics at and near surfaces with ultrafast lasers. *Gao, Karlsson*.
Molecular motors and stochastic ratchets. *Magnasco, Schmidt, Oster, Bier, Vicsek*.
Magnetoresistive oxides II: Magnetic ordering. *Heffner*.
Materials theory/Electronic and atomic structure: Novel methods. *Bernholc*.
Dislocations in deformed materials I. *Argon*.
Granular materials, avalanches, fracture and related instabilities. *Coppersmith, Radjai*.
Dillon Medal symposium. *Balsara*.

Wednesday, 19 March

morning

Sr₂RuO₄—A new strongly correlated superconductor. *Maeno, Mackenzie, Sigrist*.
Viscoelasticity in biopolymers and gels. *MacKintosh, Yurke, Weitz, Maggs, Kas*.
Symposium on magnetoresistive sensors and applications. *Daughton, Brug, Smith, Gurney, Parker*.
Printing markets and technologies. *Kipphan, Bringans, Allen, Nelson*.
Chemical dynamics at surfaces I. *Tully, Rettner, Holloway, Steele*.

Complexity in reactive systems I. *Doering, Pechukas, Wang*.
Quantum Hall effect: Theory I. *Heinonen*.
Photonic bandgaps and confinement. *Gruning*.
Protein crystal growth. *Vogel, Tiede, McPherson, Kirschner, Trinh*.
Magnetic semiconductors and tunnel junctions. *Parkin*.
Magnetoresistive oxides III: Theory. *Zhao*.
Materials theory/Electronic and atomic structure ferroelectrics. *Rabe*.
Fullerenes: Thin films, onions, and inorganic analogs. *Banhart*.
Wide-bandgap semiconductors V: SiC. *Cooper*.
Granular materials, avalanches, fracture, and related instabilities. *Kudrolli*.
Self-assembly of multifunctional polymers. *Schick, Spontak, Halperin, Iliopoulos, Thibault*.
Isostructural valence transition in YAlnCu₄. *Fisk, Lawrence*.
Borocarbide superconductors. *Canfield, Gammel, Bommeli*.
Spectroscopy of polymers. *Yazdani, Allara, Datta, Joachim, Reed*.
Biomembranes. *Raedler, Moses, Nelson, Seifert, Marko*.
Probing electron dynamics at and near surfaces with ultrafast lasers. *Martin, Duncan, Freiser, Castleman Jr.*.
Committee on minorities. *Williams, Belay*.
Chemical physics of quantum clusters I. *Ernst, Hartmann, Miller*.
Complexity in reactive systems II. *Frauenfelder, Reimann*.
Vortices and columnar defects. *Thompson*.
Highly correlated metals: Heavy fermions, Experiment III. *Beyermann*.
Exciton dynamics and non-linear optical effects. *Citrin*.
Magnetic modeling I. *Fidler, Bertotti*.
Bacteriorhodopsin: Photophysical applications. *Oesterhelt, Balashov, Kolodner, Smiley*.
X-ray magnetic scattering and dichroism. *Gibbs, Tobin*.
Magnetoresistive oxides: Thin films. *Eckstein*.
Materials theory/Electronic and atomic structure alloys. *Zunger*.
Wide-bandgap semiconductors VI: SiC, diamond, BN. *Bermudez*.
Granular materials, avalanches, fracture, and related instabilities II. *Lobkovsky*.
Magnetism and superconductivity in borocarbide. *Varma, Hariharan*.

afternoon

Physical properties of DNA. *Strey, Kamien*.
Buckley Prize symposium: Spirals in biology, chemistry and physics. *Langer, Petrov, Bodenschatz, Goldstein, Karma*.
One hundred years of electrons. *Dahl, Dresden, Watson, Laughlin*.
Formation, detection and study of small metal-carbon and metal-oxygen clusters. *Jena, Compton, El-Shall, Bowen Jr.*.
Light emission from polymers. *Fried, Frolov, Gebler, Inganas, Yoshino*.
Chemical dynamics at surfaces II. *Klein, Ceperley, Eigler, Schmickler*.
Chemical physics of quantum clusters II. *Northby, Janda, Halberstadt*.
Quantum Hall effect: Theory II. *Shimshoni*.
Quasicrystals. *Stadnik*.
Industrial applications of high-temperature superconductor materi-

als. *Hunt*.

Biological molecules in the condensed phase. *Nadarajah*.

Magnetic nanostructures. *Dowben*.

Adler Prize session: New directions on materials theory. *Joanopoulos*.

Fullerenes V: Superconducting and solid-state properties. *Yildirim*.

Wide-bandgap semiconductor VII: II-VI compounds, growth and characterization. *Furdyna*.

Dislocations in deformed materials II. *Kubin*.

The four raconteurs: Stories and anecdotes based on their writings. *Lubkin, Lucky, Koshland, Park*.

Thursday, 20 March

morning

Anomalous He_2 (T). *Osofsky, Blumberg*.

Spectroscopy of individual excitons in quantum wells. *Abstreiter, Hess, Gammon, Zimmermann*.

Structure and morphology of carbon nanotubes. *Lu, Kane, Tománek*.

New measurements made possible at the Advanced Photon Source. *Shenoy, Bunker, Isaacs, Toellner, Goldman*.

New developments in wetting. *Saam, Ross, Wyatt, Hess, Bonn*.

Recent developments in organic materials for photonics I. *Marder, Heeger, Persoons*.

Molecular clusters: From dimers to the condensed phase I. *Bacic, Bernstein, Clary*.

Novel physics and materials of mid-infrared (3–6 micron) semiconductor lasers I. *Kurtz*.

Protein folding on the submillisecond time scale. *Callender, Winkler, Phillips, Grubele, Rousseau*.

Wide-bandgap semiconductors VIII: II-VI compound lasers and optical properties. *Waag*.

Materials theory—dynamics: Surfaces and films. *Jónsson*.

He_2 in quasi one-dimensional systems. *Naughton, Melo*.

Transport in carbon nanotubes. *Fischer, Lieber*.

Spin ladders. *Broholm, Tsvetlik, Katsumata, Hyman, Nagler*.

High-frequency dynamics in semiconductor quantum structures. *Hu, Stafford, Zeuner, Oosterkamp, Fujisawa*.

Superconductivity in high magnetic fields. *Tesanovic, Springford*.

Control on nonlinear dynamical systems. *Aubry, Showalter, Collins, Spano*.

Innovations in materials physics education. *Aksay, Doyle, McNeil, Thompson, Whittingham*.

Recent developments in organic materials for photonics II. *Bredas, Perry*.

Molecular clusters II: From dimers to the condensed phase. *Saykally, Lineberger, Jordan*.

Quasiparticles in superconductors. *Ong*.

Quantum Hall effect: Transport. *Wei*.

Quantum fluids IV: ^3He . *Andreev*.

X-ray spectroscopy and dynamical diffraction. *Larson*.

Novel physics and materials of mid-infrared (3–6 micron) semiconductor lasers: II. *Capasso*.

Heme proteins, folding, dynamics. *Champion*.

Magnetic structure of multilayers. *Borchers*.

Magnetoresistive oxides: Transport properties II. *Kimura*.

Materials theory: Electronic and atomic structure surface bonding. *Modine, Feibelman*.

Self-assembly of semiconductor nanostructures. *Bennett*.

Battery materials II: Structural and interfacial aspects. *Thackeray*.

Electrically and optically active polymers. *Bunning*.

afternoon

Vortex lattice imaging. *Van Harlingen, Kes*.

Transport in quantum dot molecules. *Livermore, Matveev, Kotlyar, Blick, Wharam*.

Magnetic resonance force microscopy. *Sidles, Wago, Zhang*.

Surface-tension-driven motion in fluids and solids. *Van Hook, Davis, Neitzel, Subramanian*.

Advanced characterization of magnetic nanostructures. *Waddill, Pappas, Kortright, Harris, Venus*.

Recent developments in organic materials for photonics III. *Peyghambarian, Garito*.

Molecular clusters: From dimers to the condensed phase III. *Nesbitt, Felker, Zwiern*.

Field-temperature phase diagram of superconductors. *Kishio*.

Exchange-biased and hard-magnet films. *Nogues*.

Materials theory: Electronic and atomic structure alloys and magnetism. *Stocks*.

Phase transformations: Theory I. *Grant*.

Battery materials III: Structural and interfacial aspects. *Schlapbach*.

Diffusion and transport. *Boyd*.

Microwave effects. *Hampel, Sridhar*.

Disordered quantum magnets. *Huse, Sachdev*.

Friday, 21 March

morning

Vortex dynamics in superfluids and superconductors. *Thouless, Zhu, Niu, Rosenbaum, Clem*.

Energy levels of interacting electrons in metal particles. *Ralph, von Delft, Smith, Agam, Bahcall*.

Tunneling in manganites. *Cheong, Sun, Tokura*.

Electron density waves at surfaces. *Tosatti, Sprunger, Carpinelli, Ruggerone, Stumpf*.

Applications of chaos. *Ott, Shaw, Gauthier, Aref, Ditto*.

Intelligently designed polymers. *Wooley, Bergbreiter, Katz*.

Dynamics in glasses and supercooled liquids I. *Cummins, Kivelson, Buchenau*.

Bulk synthesis and doping. *Junod*.

Quantum fluids VI: Bose–Einstein condensation I. *Edwards*.

Numerical investigations. *Young*.

Complex fluids: General. *Tao*.

Nonlinear phenomenon: General. *Barber*.

Charge density waves. *Dekker*.

Magnetic structure and ordering. *Schiffer*.

Electronic structure: Magnetism. *Slonczewski*.

Formation in biology. *Mikhailov, Krinsky, Milton, Levine*.

Intelligent materials and systems. *Newnham*.

Phase transformations: Theory II. *Viñals*.

Positron annihilation defect I. *Lynn*.

Dendrimers and hyperbranched polymers I. *Tomalia, Mansfield, Amis, Dvornic, Hawker, Newkome*.

Entanglements and processing I. *Larson, Winter*.

Kagome magnets. *Chandra, Ramirez*.

Low temperature phase fluctuations in cuprate superconductors. *Roddick, Lemberger*.

Organic conductors in high magnetic fields. *McKenzie, Brooks, Singleton, Strong, Danner*.

Polarons in manganites. *Billinge, Millis, Drew*.

High resolution photoemission studies of surface and bulk electronic structures. *Wallden, Chiang, Jensen*.

Growth of quantum crystals. *Frossati, Kolomeisky, Hakonen*.

Surface and interface properties of quasicrystals. *Dubois, Schaub, Urban*.

Dynamics in glasses and supercooled liquids II. *Kob, Ediger, Ngai*.

Symmetry of the order parameter I. *Wu*.

Quantum Hall effect: Edge states (experimental). *Kim*.

Spin glasses. *Pázmándi*.

Nonlinear dynamics in biology and medicine. *Collins*.

Intelligent materials and systems: Smart fluids I. *Davis*.

Materials theory: Electronic and atomic structure semiconductor defects and surfaces. *Chadi*.

Evolution of island morphology. *Jacobsen*.

Phase transformations: X-ray studies. *Stephenson*.

Materials theory—dynamics: Microstructure; Fracture. *Chen*.

Positron annihilation/Defects II. *Yee*.

Dendrimers and hyperbranched polymers II. *Brabander, Goddard, Dalton, Zimmerman, Sorensen, Kim, Lin*.

Entanglements and processing II: Crystallization. *Porter, Termolina, Phillips, Prasad, Lemstra*.

Tunneling in cuprate superconductors. *Fischer, Greene*.

Structure and dynamics in magnetoresistance perovskites. *Lynn, Moudren*.

Charge density waves. *Brill, Thorne*.

Electron charging and transport in buried insulated films. *Kaczer, Meyer*.

afternoon

Bose–Einstein condensation. *Cornell, Ketterle, Griffin*.

Superfluids in aerogel. *Parpia, Halperin, Hook, Thuneberg, Chan*.

Resonant tunneling of the magnetizations of Mn_{12} acetate. *Sessoli, Friedman, Chudnovsky*.

Kinetic surface roughening in epitaxial growth. *Das Sarma, Krug, Villain*.

Control of colloidal assembly. *Marcus, Yodh, Aksay*.

Topical excitations in one-dimensional superconductors. *Gior-dano, van Otterlo, Mooij*.

Surface and interface properties of quasicrystals II. *Gellman, Jenks, Van Hove*.

Lattice properties: Defects and structural transformations. *Sarrao*.

Symmetry of the order parameter II. *Sauls*.

Nonlinear phenomena: Chaos. *Stein*.

Nanostructured surfaces and interfaces. *Poirier*.

Phase transformations: Experimental studies. *Kuk*.

Positron annihilation: Surfaces and interfaces. *Tong*.

Impurity bound states in superconductors. *Salkola, Franz*. ■