

# APS holds March meeting in Los Angeles

Meetings and symposia, sponsored by several Society Divisions, will address topics from condensed matter to the role of women in physics.

The American Physical Society will hold its March meeting in Los Angeles from Monday through Friday, 21-25 March 1983. As usual, the meeting of the Division of High-Polymer Physics will be held jointly with the General Meeting.

All of the technical sessions for this

meeting will be held in the headquarters hotel, the Westin Bonaventure, although arrangements with two other hotels, the Hyatt Regency and the Biltmore, have been made to accept overflow reservations. These alternate hotels are located about four blocks from the Westin Bonaventure.

Registration and information centers will be located outside the California Ballroom on Level 2 at the Westin Bonaventure. Advance registration will take place Sunday evening, 20 March, from 6:00 pm to 9:00 pm; regular registration will begin Monday morning at 8:30 am.

## Invited papers and sessions

### monday

#### MORNING

Symposium of the Division of Condensed-Matter Physics: Charge-density-wave Transport. *Monceau, Gruner, Bardeen, Sneddon, Gill*. San Francisco Room.

Symposium of the Division of Condensed-Matter Physics: Physics with ultrafast pulses. *Williams, Auston, Orlowski, Smirl, Tang*. Sacramento Room.

Symposium of the Division of Biological Physics: Condensed and modulated phases in lipid bilayers. *Stamatoff, Doane, Doniach, Scott*. San Diego Room.

Symposium on glasses and time-dependent phenomena in polymers. Emerald Bay Room.

#### AFTERNOON

Symposium of the Division of Condensed-Matter Physics: Dynamics of structural changes. *Turnbull, Mourou, Larson, Yen, Steeds*. San Francisco Room.

Symposium of the Division of Condensed-Matter Physics: Transport in one-dimensional structures in semiconductors. *Fowler, Azbel, Skocpol, Wheeler*. Sacramento Room.

Symposium of the Division of Biological Physics: Energy transduction: proton pumping in purple membrane. *Lozier, Lewis, Rayfield, Glaeser, Nagle*. San Diego Room.

Joint Symposium of the Division of Electron and Atomic Physics and the Division of Chemical Physics: Molecular-beam scattering from solid surfaces. *Scoles, Barker, Kleyn, Cardillo*. San Jose Room.

#### EVENING

Symposium of the Forum on Physics and Society: The problem of nuclear war. *Scheer, Cohen, Barker, DeWitt*. San Francisco Room.

### tuesday

#### MORNING

Ford Prize Session. *Takayanagi, Tadokoro (HPP Prize Winners), Flory, Lando, Sternstein*. Avalon Room.

Symposium of the Division of Condensed-Matter Physics: Physics at high pressure. *Silvera, Schilling, Shelton, Jayaraman, McMahan*. San Francisco Room.

Symposium of the Division of Condensed-Matter Physics: Macroscopic quantum effects. *Leggett, Ambegaokar, Chakravarty, Webb*. Sacramento Room.

Symposium of the Division of Biological Physics: Nuclear-magnetic-resonance imaging. *Lauterbur (DBP Prize Winner), Chance, Brady, Crooks*. San Diego Room.

Symposium of the Division of Condensed-Matter Physics: Silicides and silicide interfaces. *Ho, Weaver, Tung, Nemanich*. San Jose Room.

#### AFTERNOON

Symposium of the Division of Condensed-Matter Physics: Disordered metals and alloys. *Nagel, Robbins, Connolly, Flynn, Bishop*. San Francisco Room.

Symposium of the Division of Condensed-Matter Physics: Magnetic surface phenomena in liquid He<sup>3</sup>. *Friedman, DeConde, Bozler, Chapellier*. Sacramento Room.

Symposium of the Division of Biological Physics: Noise and fluctuations in biophysical systems. *Webb, Weissman, DeFelice, Bialek*. San Diego Room.

Symposium of the Division of Fluid Dynamics: Recent developments in low-temperature helium physics. *Dahm, Giannetta, Gasparini, Edwards, Greywall*. San Jose Room.

#### EVENING

Symposium of the Forum on Physics and Society: Physics education: The crisis and beyond. *Holton, Saxon, Franz*. San Francisco Room.

### wednesday

#### MORNING

Symposium of the Division of Condensed-Matter Physics: Structure and excitation of glasses. *Phillips, Angell, Galeener, Boolchand*.



The meeting is organized into 38 invited paper sessions and 117 contributed paper sessions. There will be a total of 2064 contributed papers for this meeting. The Division of Condensed-Matter Physics, which accounts for the major part of the program of this meeting, has organized several symposia and invited paper sessions, shown in the table below. The division has also organized an invited-poster session on "National facilities of importance to condensed-matter physics" for Tuesday evening, from 4 to 6 pm.

The Division of Biological Physics has organized four invited symposia. Invited symposia of the Division of Chemical Physics begin on Wednesday morning, with a four-part session on "Order and chaos in molecular and related systems"; others are listed below.

The Division of Fluid Dynamics and



Thorpe. San Francisco Room.

Symposium of the Division of Condensed-Matter Physics: Organic conductors. *Heeger (Buckley Prize Winner), Jerome, Greene, Azevedo, Wudl.* Sacramento Room.

Symposium of the Division of Chemical Physics: Order and Chaos in Molecular and Related Systems. *Ford, Kadanoff, Kaufman, Hohenberg.* San Diego Room.

Symposium of the Committee on Applications of Physics: Physics of VLSI—fabrication, microlithography and physical properties of sub-0.1-micron structures. *Prober, Jackel, Laibowitz, Isaacson.* San Jose Room.

#### AFTERNOON

Ceremonial Session in honor of APS prize winners. San Francisco Room.

Symposium of the Division of Condensed-Matter Physics: Numerical methods in many-particle physics. *Wilson, Swendsen, Toussaint, Ceperley.* San Francisco Room.

Symposium of the Division of Condensed-Matter Physics: Surface and film magnetism. *Freeman, Meserve, Tersoff, Prinz, Rau.* Sacramento Room.

Symposium of the Division of Chemical Physics: Order and chaos in molecular and related systems. *Gutzwiller, Pechukas, Marcus, Reinhardt.* San Diego Room.

Symposium of the Division of Nuclear Physics: Frontiers of nuclear physics. *Armbruster, Stephenson, Iachello, Fuller.* San Jose Room.

#### EVENING

Symposium of the Committee on the Status of Women in Physics: Federal agency funding policies and grantsmanship. *Bostock, Berlincourt, Stevens, Connolly.* San Francisco Room.

### thursday

#### MORNING

Symposium of the Division of Condensed-Matter Physics: Semicon-

ductor surface reconstruction. *Pandey, Tromp, McRae, Conrad, Hansson.* San Francisco Room.

Symposium of the Division of Condensed-Matter Physics: Solid-state tunable lasers. *Mollenauer, Schneider, German, Moulton, Walling.* Sacramento Room.

Symposium of the Division of Chemical Physics: Order and chaos in molecular and related systems. *Heller, Kinsey, Klemperer, Schlag.* San Diego Room.

Symposium of the Committee on Applications of Physics: Advanced energy projects. *Hunt, Lonsdale, Winston, Sager, Tidman.* San Jose Room.

Address of the winner of the 1983 Irving Langmuir Prize. *Herschbach.* San Diego Room.

#### AFTERNOON

Symposium of the Division of Condensed-Matter Physics: Colloidal crystals. *Pieranski, Ackerson, Clark, Pincus, Hachisu.* San Francisco Room.

Symposium of the Division of Condensed-Matter Physics: Resonant photoemission. *Dehmer, Loubriel, Avouris, Davis.* Sacramento Room.

Symposium of the Division of Chemical Physics: Order and chaos in molecular and related systems. *Zewail, Crim, Berne, Ackerhalt, Klemperer.* San Diego Room.

Symposium of the Division of Condensed-Matter Physics: Physics of computation. *Bennett, Toffoli, Zurek, Benioff.* San Jose Room.

### friday

#### MORNING

Symposium of the Division of Condensed-Matter Physics: Surface vibrational spectroscopy. *Plummer, Mills, Chabal, Campion, Persson.* San Francisco Room.

Symposium of the Committee on Applications in Physics: Robotics and physics. *Wolfram, Hosack, Haar, Wise, Corby.* Sacramento Room.



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the Division of Nuclear Physics have each organized a single invited paper session.

The Forum continues to be active in airing physics issues of public importance. On Monday it deals with "The problem of nuclear war" in an evening invited paper session (7:30 pm). On Tuesday evening at the same time the subject is "Physics education: the crisis and beyond."

On Wednesday morning the Committee on Applications of Physics will sponsor the first of its three invited symposia.

On Wednesday evening at 7:30 the Committee on the Status of Women in Physics will sponsor a session on "Federal agency funding policies and grantsmanship."

In addition to these invited-paper sessions, there are thirty individual invited papers distributed among various contributed-paper sessions. These contributed paper sessions contain a major portion of the technical papers of the March meeting.

Four sessions of contributed poster displays will take place on Tuesday; in the morning, DCMP will sponsor two, and in the afternoon DHPP will assume the honors. The DCMP invited poster session, mentioned earlier, will be displayed on Tuesday evening. Five post-deadline poster sessions, which accommodate contributed papers that were received late, will take place on Wednesday and Thursday.

Those speakers requiring audio/visual equipment other than overhead projectors should contact the local chairman, Ward Whaling, at California Institute of Technology, Pasadena, California 91109.

## Ceremonial session

On Wednesday afternoon at 1:30 in the San Francisco Ballroom, a Ceremonial Session will take place at which APS President Robert Marshak will award the following six 1983 APS prizes: the Oliver E. Buckley Condensed-Matter Physics Prize to Alan J. Heeger; the High-Polymer Physics Prize to Hiroyuki Tadokoro and Motowo Takayanagi; the International Prize for New Materials to David Turnbull; the Earle K. Plyler Prize for Molecular Spectroscopy to William A. Klemperer; the Biological Physics Prize to Paul C. Lauterbur; and the Irving Langmuir Prize to Dudley R. Hershbach. Prize winners will speak at invited sessions devoted to their specialties.

## Society of Physics Students

Symposia organized by the SPS (Society of Physics Students) are scheduled for Monday morning, and (tentatively) Tuesday afternoon. Special invited papers will be presented Tuesday, Wednesday and Thursday, early in

the the afternoon, before the APS sessions begin.

## Receptions

At 5:30 on Monday evening, 21 March, an informal APS reception (lasting approximately two hours) will be held in the Sacramento room. Beverages can be obtained from a cash bar, and hors d'oeuvres will be provided by the Society.

The Laboratory of Atomic and Solid-State Physics at Cornell University invites its current members, its alumni, former postdoctoral associates, and visitors to a reception on Tuesday evening, from 8:00 to 11:00 pm in the Hotel.

The Department of Physics of the University of Illinois at Urbana/Champaign invites the alumni and former postdoctorals of the University of Illinois to a coffee hour on Tuesday evening at 5:30 pm.

## Business meetings

The business meetings of the Divisions are scheduled as follows:

Biological Physics: Tuesday at 5:00 pm in the San Diego Room.

Chemical Physics: Thursday at 5:30 pm in the San Diego Room.

Condensed-Matter Physics: Wednesday at 5:00 pm in the Sacramento Room.

High-Polymer Physics: Tuesday at 5:00 pm in the Catalina Ballroom.

## Short courses

Two short courses are scheduled to be held prior to the main meeting, on 19-20 March (Saturday and Sunday).

The Division of Biological Physics plans to present the course "Techniques of synchrotron radiation research, emphasizing applications to biological problems," from 9:00 am to 5:00 pm on both days in the Palos Verdes room.

The Division of High-Polymer Physics will offer the course "Modern methods of physical characterization of polymer solids," from 9:00 am to 5:00 pm in the San Bernardino Room, also on both days.

## Physics show

A physics show, organized by the American Institute of Physics, will take place in the Exposition Hall. It will feature research instruments, apparatus and materials. In addition, scientific books and periodicals will be on display. The show will run from noon to 6 pm on Tuesday, from 10 am to 5 pm on Wednesday, and from 10 am to 4 pm on Thursday.

## Newsroom

Under the supervision of AIP's Public Information Division, a newsroom will be in operation throughout the meeting. Its headquarters will be located in the La Brea room. —JJI