

Anaheim hosts the APS and AAPT

New particles and applications of physics will highlight the annual winter meeting of the two societies; winter, however, should not be much in evidence in southern California.

Robert A. Saar

Issues directly affecting the human condition—food production, health, energy, education and applications of physics will all be discussed in sessions at the annual joint meeting of the American Physical Society and the American Association of Physics Teachers. The four-day meeting, starting on 29 January (running Wednesday through Saturday), will take place mostly at the Anaheim Convention Center in Anaheim, California, a southeastern suburb of Los Angeles and the home of world-famous Disneyland. The gatherings not being held at the Convention Center will be most APS-AAPT joint sessions and all AAPT meetings, to be conducted at the nearby Royal Inn.

Several awards will be presented at the joint APS-AAPT Ceremonial Session on Thursday afternoon. Incoming APS president Chien-Shiung Wu and AAPT president Sherwood Haynes will

preside over the gathering at which Ludwig Faddeev, of the Stechlov Mathematical Institute, Leningrad, is scheduled to receive the 1975 Dannie Heineman Prize for Mathematical Physics. He will be cited "for his mathematically and physically incisive work on the three-body problem, and for his profound contribution to the quantization of gauge fields by the method of functional integration." Outgoing APS president Wolfgang Panofsky will give his address and Robert Resnick (Rensselaer Polytechnic Institute) will receive the AAPT Oersted Medal. Resnick will give his response, followed by Riccardo Giacconi's delivery of the 1975 Richtmyer Memorial Lecture entitled "Progress in X-ray Astronomy."

Following the joint ceremonial session there will be an APS sponsored no-host cocktail party from 5:00 to 7:00 p.m. in lieu of the usual banquet. A

second cocktail party, sponsored by the APS Forum on Physics and Society will take place after the Forum's Friday afternoon session. All are invited to both parties.

APS: Of special and general interest

Of the 132 invited and 457 contributed papers, many reflect present concern with societal problems. Energy continues to be an important topic (as it was at last year's winter meeting) with reports scheduled on the APS Summer Study on Radiation Effects on Materials (Friday morning) and papers from the APS study on Technical Aspects of More Efficient Utilization of Energy (Friday afternoon). There are also sessions entitled "Physics of Solar Energy Conversion" (Friday morning) and

Robert A. Saar is assistant editor on the staff of PHYSICS TODAY



"Energy Problems Related to Fluid Dynamics" (Saturday morning). The Forum is conducting five sessions, including a symposium on "Courses in Physics and Society" (sponsored jointly by the AAPT), a session entitled "APS and Public Affairs," a report on the Penn State Conference on Tradition and Change in Physics Graduate Education and a session on "Climate and Food Production." The recent discovery of two new sub-atomic particles, including the J particle, (see page 17) will be reported on by workers in two of the US groups that discovered it. Samuel Ting (MIT) will present a paper on work done at Brookhaven National Laboratory and Roy Schwitters will discuss work done at the Stanford Linear Accelerator Center. Other general interest sessions include "Biomedical Uses of Accelerated Particles" (Wednesday morning), a Wednesday afternoon APS/AAPT session on "The Influence of Counselling Problems" (arranged by the APS Committee on Women in Physics), and a session entitled "Exploration of Planets" (Friday afternoon).

The Council of the APS will convene on Tuesday morning, 28 January for a day-long session. All APS members are invited to observe. The annual busi-

ness meeting of the Society will be held Wednesday afternoon at 3:00 at the Convention Center.

AAPT special interest

A wide variety of activities are scheduled for the AAPT.

► A display of entries to the eighth biennial apparatus competition will be on view from Wednesday to Friday; judg-

ing for the competition will take place Tuesday evening.

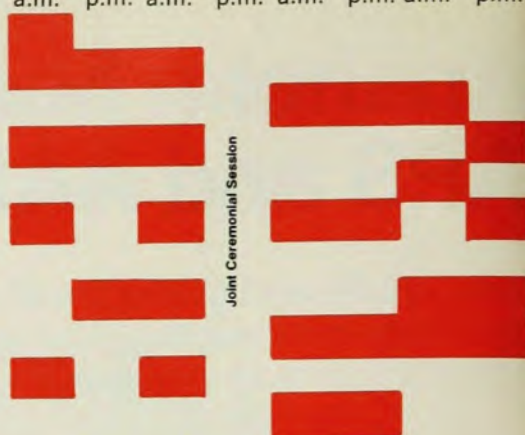
► A computer workshop will enable visitors to examine computer assisted instruction programs.

► The annual business meeting will include the announcement of election results and the presentation of distinguished service citations to Wilbur Johnson, Stanley Ballard, Walter Mas-

Symposia of APS divisions

Biological physics
Chemical physics
Cosmic physics
Electron and atomic physics
Fluid dynamics
Forum on physics and society
High-polymer physics
Nuclear physics
Particles and fields
Plasma physics
Solid-state physics

Wednesday Thursday Friday Saturday
a.m. p.m. a.m. p.m. a.m. p.m. a.m. p.m.



Joint Ceremonial Session

Invited papers and special events

ALL DAY

Council meeting (APS)

AFTERNOON - EVENING

Advance registration (APS, AAPT, SPS)

EVENING

Judging of the apparatus competition (AAPT)

MORNING

Forum on physics and society: The APS and public affairs (APS) W. K. H. Panofsky, J. Primack, C. Schwartz

Biological physics: Biomedical uses of accelerated particles (APS) G. Rosenbaum, N. Peek, L. Rosen, C. Tobias

Plasma physics: Controlled fusion research (APS) B. Miller, T. Ohkawa, G. H. McCall, G. Guest

Chemical physics: Molecular relaxation and energy transfer I (APS) S. A. Rice, M. B. Robin, J. C. Polanyi, W. Klemperer

Electron and atomic physics: New frontiers in atomic physics (APS) R. D. Deslattes, K. M. Evenson, S. R. Lundeen

Integrated circuits and the instrumented laboratory (AAPT) J. G. King, J. W. McWane, R. Tinker

Workshop on computer dialogs (AAPT) A. Bork

AFTERNOON

Prospects for controlled fusion (SPS) J. Dawson

Optical communications (APS) S. J. Buchsbaum, A. G. Chynoweth, H. C. Casey Jr, A. Yariv, J. R. Whinnery

Nuclear physics (APS) C. Maguire, T. Udagawa, J. P. Vary, R. G. H. Robertson

Electron and atomic physics: Atomic physics in the controlled thermonuclear program (APS) R. C. Elton, H. R. Griem, J. R. Hiskes, W. L. Wiese

Chemical physics: Molecular relaxation and energy transfer II (APS) P. M. Rentzepis, R. A. Marcus, J. S. Waugh, C. B. Moore

Committee of women in physics: The influence of counselling programs (APS, AAPT) E. Matthews, B. Pollak, S. Yulke

Annual business meeting (APS)

MORNING

Forum on physics and society: Tradition and change in physics graduate education (APS) L. Grodzins, M. Perl, D. Hafemeister

Nuclear physics: General interest session (APS) T. W. Donnelly, E. G. Adelberger, C. T. Alonso, M. S. Kaminsky

Electron and atomic physics: Methods of theoretical physics (APS) P. Bakshi, J. R. Klauder, F. T. Hioe, B. Simon

Chemical physics: Surface physics (APS) R. A. Lovett, W. E. Plummer, K. A. Jackson, T. Wolfram

Plasma physics (APS) A. Bers, D. A. Hammer, G. Morales, G. C. Vlases

Joint symposium (AAPT, SPS)

Broadening-the-curriculum conference and current issues (AAPT) R. Tinker, H. J. Healer

AFTERNOON

Joint Ceremonial Session (APS, AAPT) W. K. H. Panofsky, E. L. Jossem, R. Resnick, R. Giacconi

EVENING

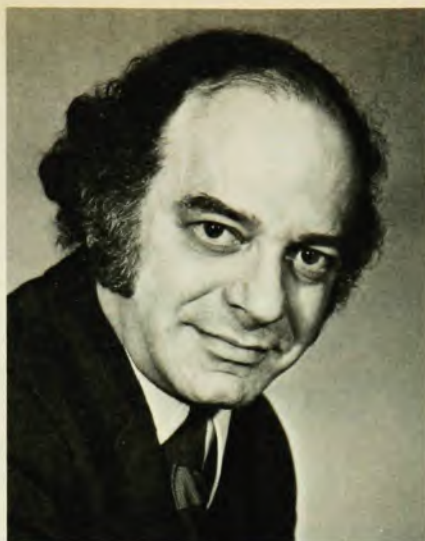
Informal no-host cocktail party (APS, AAPT, SPS)

tues.
wed.

thurs.



WU



RESNICK



GIACCONI

sey, Phillip Breiske, Lester Paldy and Bill Aldridge.

► The Film Show involves a continuous showing of the latest physics films all day Wednesday, Thursday morning and all day Friday.

► There will be a Friday evening session featuring invited papers by the winners of the store-front physics competition and a talk by Frank Oppenheimer,

"The Exploratorium and Other Ways of Learning About Physics." The session was arranged by the joint APS-AAPT Committee on Science Education for the General Public.

► Saturday brings several interesting sessions including one, for the first time, on applications of Piaget learning psychology to science teaching ("Workshop on Physics Teaching and the De-

velopment of Reasoning") and another discussing physics in a zero gravity environment featuring Skylab astronaut Owen K. Garriott.

The SPS program for the meeting includes two invited lectures: "Prospects for Controlled Fusion" by John Dawson (UCLA) and "Applications of Position Sensitive Particle Detectors to Medical and Biological Research" by Victor

Council meeting (AAPT)

MORNING

Annual business session (AAPT)

Applications of synchrotron radiation (APS) *S. Kapitza, S. Doniach, P. Eisenberger, D. E. Eastman, N. Webb*

Cosmic physics: Cosmic rays (APS) *R. Hartman, R. Mewaldt, E. Shirk, W. D. Arnett*

Solid-state physics: Physics of solar energy conversion (APS) *P. Rappaport, G. H. Schwuttke, B. O. Seraphin, R. Post*

Particles and fields: Theory: Quarks, hadrons and leptons (APS) *B. Kayser, K. G. Wilson, S. D. Drell, J. C. Pati*

General interest session (APS) *F. Vook, L. D. Faddeev*

Forum on physics and society: The purpose and context of physics and society courses (APS, AAPT) *E. D. Heitowitz, C. Iltis, C. D. Spencer, L. D. Weiler*

AFTERNOON

Applications of position sensitive particle detectors to medical and biological research (SPS) *V. Perez-Mendez*

General interest session: More effective utilization of energy (APS) *M. H. Ross, S. Berman, D. L. Hartley*

Cosmic physics: Exploration of the planets (APS) *S. I. Rasool, B. C. Murray, M. J. S. Belton, T. Owen*

Solid-state physics: General interest session on superconductivity (APS) *B. Birmingham, B. Matthias, J. R. Gavaler, W. Keller*

Particles and fields: Hadron scattering on complex nuclei (APS) *P. F. Slattery, B. Gobbi, W. Busza, O. Piccioni*

Forum on physics and society: Content and methodology of physics and society courses (APS, AAPT) *P. Gibbs, R. H. Knapp Jr, F. von Hippel, D. Schroeder*

No-host cocktail party (APS Forum)

EVENING

AAPT/APS Committee on Science Education for the General Public (APS, AAPT) *F. Oppenheimer*

MORNING

Cosmic physics: Astrophysics (APS) *R. C. Haymes, D. N. Schramm, E. M. Burbidge, D. D. Clayton*

Fluid dynamics: Energy problems related to fluid mechanics (APS) *K. Brueckner, S. S. Penner, G. Hagey*

Nuclear physics: Photoneuclear processes (APS) *D. H. Youngblood, E. R. Flynn, J. R. Calarco, F. R. Buskirk, H. E. Jackson*

Particles and fields: Study of hadron interactions at high energies (APS) *P. O. Mazur, A. V. Tollestrup, B. C. Shen, D. M. Ritson*

High-school physics teacher preparation and related topics (AAPT) *L. C. McDermott*

Workshop on physics teaching and the development of reasoning (AAPT) *R. Karplus*

AFTERNOON

Forum on physics and society: Climate and food production (APS) *R. G. Roosen, J. Goss, M. Rosenzweig*

Electron and atomic physics: Atomic and Molecular Astrophysics (APS) *W. D. Watson, G. H. Dunn, R. Flannery, J. C. Weisheit*

Nuclear physics (APS) *J. N. Ginocchio, D. J. Ernst, J. Eck, C. Glashäusser*

Particles and fields: Experimental Studies of Weak and Electromagnetic Interactions (APS) *S. Ting, R. F. Schwitters, R. Messner, S. D. Ecklund, G. K. O'Neill*

Physics in a zero gravity environment (AAPT) *O. K. Garriott, P. Dauber, T. Campbell, A. Rhomberg*

take a TPOSitive approach to pulse height analysis

Our new TPOS is the most powerful, most flexible software system commercially available for pulse height analysis work. It's the latest improvement we've made in the TP 5000 PHA system... already preferred by researchers in major labs across the country. With this new software system, the TP 5000 is TPOSitively unbeatable for a wide range of experiments.

If you are considering a PDP-11 computer-based PHA system for your lab, give us a call at 615/482-3491.

Or write:

Tennecomp Systems, Inc.,
795 Oak Ridge Turnpike, Oak Ridge, Tn. 37830

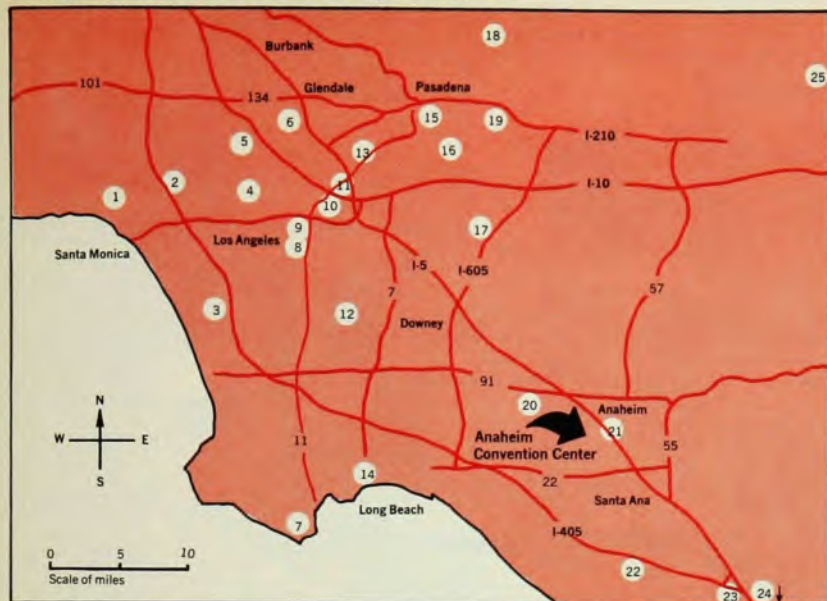
see us at the
A.P.S. SHOW,
Booth 103

TENNECOMP SYSTEMS INC.



See us at Booth 103 Physics Show

Things to see in the Los Angeles area



- | | |
|--|--|
| 1. Will Rogers State Historical Park | 13. Southwest Museum |
| 2. University of California, Los Angeles | 14. Queen Mary (Museum and entertainment) |
| 3. Los Angeles International Airport | 15. California Institute of Technology |
| 4. Hancock Park (La Brea Pits, Los Angeles County Museum of Art) | 16. Huntington Library and Art Gallery |
| 5. Hollywood | 17. Narrows Dam Recreational Area |
| 6. Griffith Park (Planetarium and Observatory, Hall of Science, Zoo) | 18. Hale Observatory and Skyline Park |
| 7. Cabrillo Beach Marine Museum | 19. Los Angeles Arboretum, Santa Anita Park (Horse racing) |
| 8. Exposition Park (California Museum of Science and Industry, Los Angeles County Museum of Natural History) | 20. Buena Park (Knotts Berry Farm, Movieland Wax Museum) |
| 9. University of Southern California | 21. Disneyland |
| 10. Civic Center (Music Center) | 22. Briggs Cunningham Auto Museum |
| 11. Olvera Street (Spanish-American heritage, Mexican-American and Chinese restaurants) | 23. Lion Country Safari |
| 12. Watts Towers (Large single work of art created by one man) | 24. San Juan Capistrano |
| | 25. San Bernardino National Forest (50 mile scenic route) |

Perez-Mendez (UC San Francisco and Lawrence Berkeley Laboratory). There is also an SPS symposium as part of the Thursday morning AAPT-SPS joint session. The symposium will feature contributed student papers; Charles A. Whitten Jr will preside.

AIP Services

The Institute will conduct a Placement Center that facilitates personal interviews between physicists attending the meeting who seek employment and employer's representatives. The Center will be open from 9:00 a.m. to 5:00 p.m., Wednesday through Friday, 29-31 January. Appointments for personal consultation can be made with Raymond Sears, APS placement consultant. National Science Foundation representatives will be at the meeting to advise society members interested in participating in NSF programs.

The press headquarters will be located in the VIP room at the Convention Center. Audrey Likely of AIP will manage the press service on behalf of the APS and AAPT. Press releases about the meeting will be distributed from this office and interviews will be

arranged between authors of newsworthy papers and members of the media.

The 23rd Annual Physics Show will feature an extensive display of scientific instruments, components and materials, as well as books, periodicals and teaching aids. Show hours are from 10:00 a.m. to 5:00 p.m. on Wednesday and Thursday and 10:00 to 3:00 on Friday.

For the benefit of those presenting papers, all sessions will be equipped with projectors that accommodate $3\frac{1}{4} \times 4$ inch and 2×2 inch slides as well as viewgraph projectors.

Getting there

Travelers arriving by air from outside California will come into the Los Angeles International Airport. Airport Service Inc. buses ply the route between the airport and the Anaheim Convention Center area every halfhour from 7:15 a.m. to midnight. The fare is \$2.95 and the transit time is 55 minutes. Because some of the hotels are somewhat away from the Convention Center, free shuttle buses, running from 8:30 a.m. to 5:30 p.m. (to 3:00 p.m. on Saturday) will serve the area. □

Radioactive Sources

NEW CATALOG 1974-1975

Our completely revised edition includes sections on

MÖSSBAUER EFFECT MATERIALS

FISSION SOURCES

VERY LOW ENERGY X-RAY SOURCES

CALIBRATION STANDARDS

Visit our exhibit at
THE PHYSICS SHOW

BOOTH 218
Anaheim Jan. 29-31

(213) 843-7000



ISOTOPE PRODUCTS LABORATORIES

404 S. Lake St., Burbank, Calif. 91502
Circle No. 23 on Reader Service Card