

AAPT and APS meet in San Francisco

Highlights include sessions on physics education, particle physics, fractals, astronomy, SDI, Chernobyl and J. Robert Oppenheimer's life, as well as awards and the annual physics show.

The American Association of Physics Teachers and The American Physical Society will hold their annual joint meeting in San Francisco on 28-31 January at the Cathedral Hill Hotel on Van Ness Avenue at Geary Street. Attendees may register at the Golden Gateway Holiday Inn (on Van Ness Avenue) on Tuesday, 27 January, from 5 pm to 8 pm, or at the Cathedral Hill Wednesday and Thursday from 7:30 am to 4:30 pm, Friday from 8 am to 2 pm and Saturday from 8 am to 10 am.

AAPT and APS will hold their joint welcoming reception on Wednesday evening in the exhibit area. A banquet will be held at the Celadon restaurant

in Chinatown on Friday, 30 January; Kenneth Laws (Dickinson College) will speak on the physics of dance at the banquet. Four AAPT committees have planned open houses at the meeting: the Women in Physics Committee on Wednesday evening, the Two-Year College Committee on Wednesday evening, the High School Committee on Thursday afternoon and the Minority and International Education Committee on Thursday afternoon. In addition, the San Francisco Exploratorium will hold an open house for meeting participants on Thursday evening.

AAPT will offer 13 invited sessions on such varied topics as research in physics education, the Physics Olympiad, and physics teaching and science fiction, as well as 30 sessions for contributed papers on topics in physics and physics education. The Society of Physics Students has also organized two invited sessions and one contributed session. Four plenary sessions are planned for the meeting: particles and fields (AAPT), fractals in physics (AAPT), the Strategic Defense Initiative (APS) and frontiers of astronomy (AAPT). Two joint symposia will be held: one by the AAPT and APS committees on women in physics, on role models, networks and the crucial teacher; and the other by the APS Division of History of Physics and the AAPT Committee on History and Philosophy of Physics, on the life and legacy of J. Robert Oppenheimer. In addition AAPT will offer symposia on

research in undergraduate institutions and industrial interactions with physics education; the APS Division of Nuclear Physics will hold a symposium on recent developments in that field; and the APS Forum on Physics and Society will sponsor symposia on science technology and the comprehensive test ban treaty, teaching physics and society, and Chernobyl and the future of nuclear power.

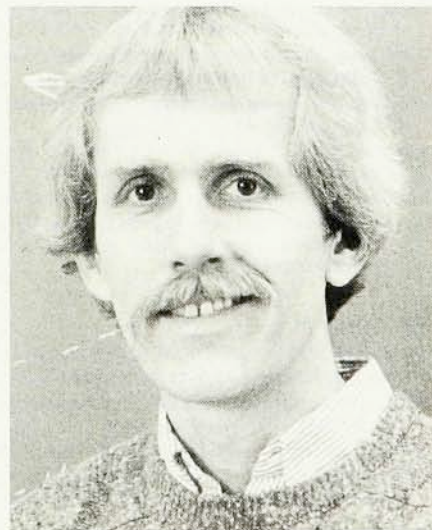
AAPT has organized a number of workshops for Monday and Tuesday, including:

Exhibit-based physics education
Apple II game port interfacing
Producing and using videotapes in

SWARTZ



WILL



physics education
Using the Apple II or the Commodore 64 in the laboratory
Interactive videodisc lesson development
Using microcomputer-based laboratories to teach physical intuition
Teaching and learning physics with personal productivity software
Laboratory interfacing to the IBM personal computer
Incorporating educational software in a physics classroom
Apple assembly language and animation
Cartooning and chalkboard techniques
How to teach relativity in high school—relativity visualized
Teaching electricity with capacitor-controlled bulb lighting
Video laser discs and education

The American Institute of Physics and the Northern California Association of Science Writers will sponsor a seminar for science writers on particle physics on Tuesday from 2 to 5 pm at the Cathedral Hill. The speakers will be Martin Perl (SLAC), who will also serve as chairman of the seminar, Leon M. Lederman (Fermilab) and John Schwartz (Caltech).

Awards

The joint ceremonial session will take place on Friday afternoon. The American Physical Society will present its Apker Award to Terrence L. Hwa (Stanford University). (See page 95 for complete details.)

The American Association of Physics Teachers will present the Oersted Medal to Clifford E. Swartz (State University of New York, Stony Brook) for his contributions to physics education. Swartz received his AB (1945), MS (1946) and PhD in physics (1951) from the University of Rochester. From 1951 to 1962 he was an associate physicist at Brookhaven National Laboratory; in 1957 he became an associate professor at Stony Brook, and in 1967 a full professor. During the 1950s and early 1960s Swartz worked primarily in particle physics and accelerator technology. He was a member of the New York State education department committee responsible for revising the state's high school physics syllabus (1961–62). In 1967 he became editor of *The Physics Teacher*, a position he held until 1985. He has written many books on physics and science at all levels, including *Foundations of Physics*, with Robert Lehrman (Holt, Rinehart and Winston, 1965), *The Fundamental Particles* (Addison-Wesley, 1965), *Phenomenal Physics* (Wiley, 1981), *Used Math* (Prentice-Hall, 1973) and *Prelude to Physics* (Wiley, 1983). He is currently doing research in gravitation and revising the elementary school science text he wrote 20 years ago.

Clifford M. Will (Washington University, St. Louis) will present the 46th Richtmyer Memorial Lecture, "Was Einstein right?" Will received his BSc from McMaster University in 1968 and his PhD from Caltech in 1971. He

taught at Caltech (1971–72) and was Enrico Fermi Fellow at the University of Chicago (1972–74) before becoming an assistant professor of physics at Stanford University in 1974. He went to Washington University in 1981 as associate professor of physics, and became a full professor in 1985. Will's primary research interest has been general relativity theory. Early in his career he worked on theoretical interpretations of tests of theories of gravitation. His research now is concerned with the general relativistic theory of such phenomena as black holes, gravitational waves and the early universe. Will has written *Theory and Experiment in Gravitational Physics* (Cambridge U.P., 1981) and *Was Einstein Right?* (Basic, 1986).

Exhibit and placement center

The annual physics show and shared book exhibit will be open on Wednesday from 8 am to 3:30 pm (with exclusive viewing hours and the welcome reception from 6 to 7:30 pm), on Thursday from 8 am to 2 pm and from 4 pm to 6 pm, and on Friday from 8 am to 3 pm. The American Institute of Physics will operate a placement center for meeting participants at the Cathedral Hill from 8 am to 5 pm Wednesday through Friday and from 8 am to noon on Saturday. AIP will also operate a press room at the Cathedral Hill Wednesday through Friday from 8:30 am to 5 pm.

—MARGARET MARYNOWSKI □

Special sessions and invited papers

Wednesday

AAPT session on educational effectiveness of computers. T. A. Ager; J. H. Larkin; A. F. O'Neal

AAPT session on core-curriculum topics for the algebra-trigonometry-based course. T. L. O'Kuma; J. D. Wall; J. L. Hubisz; C. Liu

Plenary session on particles and fields. B. Cabrera; P. L. Richards; M. Chanowitz; M. Peskin; S. Wojcicki

AAPT symposium on research in undergraduate institutions. L. Rogers; C. L. Hodges; L. R. Hunter; R. A. Hefferlin

AAPT session on new and forgotten topics for freshman physics. D. T. Moore; E. W. Kolb; S. C. Fain

Symposium of APS Division of Nuclear Physics on recent developments in nuclear science. W. C. Haxton; C. van Bibber; T. F. Budinger

AAPT session on detecting earthquakes and nuclear explosions. C. Isenberg
Symposium of APS Forum on Physics and Society on science, technology and the comprehensive test ban treaty. J. P. Holdren; P. S. Brown; C. S. Archambeau; T. C. Bache

Thursday

Symposium of APS Forum on Physics and Society on physics and society teaching—now. J. S. Rigden; A. A. Bartlett; B. G. Dick; A. Hobson

AAPT session on physics research at undergraduate institutions. R. Calvert; R. E. Mikkens; W. B. Hawkins

Plenary session on fractals in physics. R. Voss; D. W. Schaefer; H.-O. Peitgen

Joint symposium on the life and legacy of J. Robert Oppenheimer. J. L. Heilbron; R. R. Wilson; D. J. Kevles; R. F. Bacher

AAPT session on new learning tools in new environments. R. J. Semper; E. Feher; E. Mendis; G. Wheeler

APS session on fluids and plasmas. T. L. Hwa

Friday

AAPT session on content of first-year college physics texts. J. S. Risley; G. J. Aubrecht; A. A. Bartlett

AAPT session on the Far East Physics Conference. E. L. Jossem; J. M. Wilson; Y. van Hise; Z. Kai-Hua; Y. Ying

AAPT session on research in physics education: Naive beliefs and beyond. J. H. Larkin; G. L. Erickson; L. Viennot; J. Minstrell

Plenary session on the Strategic Defense Initiative. C. K. Patel; L. Marquet; H. W. Kendall; H. L. Lynch

Saturday

Symposium of APS Forum on Physics and Society on Chernobyl and the future of nuclear power. E. L. Zabroski; L. R. Anspaugh; B. Wolfe; J. Harding

AAPT session on crisis in education. J. Rutherford; W. Aldridge; S. M. Malcom

AAPT symposium on industrial interactions with physics education. G. Ginsburg; D. Stoneback; S. Millman; A. V. Brown

AAPT session on uses of computers. A. Eisenkraft

AAPT session on teacher training programs and workshops. R. H. Bloomer Jr

Plenary session on frontiers of astronomy. J. Nelson; R. Muller; B. Oliver; S. Lea

Joint symposium on women in physics: Role models, networks and the crucial teacher. V. Trimble; N. Cole; H. R. Quinn; C. Chow

AAPT session on physics teaching and science fiction. P. Anderson; G. Benford; V. Vinge; A. Goswami