

lasers, molecular lasers in the infrared, high-power lasers (including invention of the carbon-dioxide laser), nonlinear optics, tunable lasers in the infrared, high-resolution spectroscopy, and pollution detection. He received a BE from the University of Poona in 1958, an MS in 1959 and PhD in 1961 from Stanford University. He joined Bell Labs in 1961 and has been there ever since. In 1967 he became head of the Infrared Physics and Electronics Research Department, in 1970 Director of the Electronics Research Laboratory, in 1976 Director of the Physical Research Lab, and since 1981 he has been Executive Director, Research, Physics Division.

While APS has performed studies of such scientific subjects as nuclear-reactor safety and photovoltaic energy conversion, this is the first time it has delved into the complex issues of weapons systems and their consequences for arms control. Because of the nature of the topic, members of the committee are not all likely to be physicists. —IG

Presidential awards for young investigators in physics

The White House Office of Science and Technology Policy named on 17 February the first throng of 200 scientists and engineers from 74 universities in 35 states as recipients of the Presidential Young Investigators Awards. Each award winner may receive as much as \$100 000 per year for five years in a combination of Federal and matching private funds. The awards are meant to help US universities attract and retain outstanding PhDs early in their careers so that they are not lured away from classroom teaching and academic research by the incentive of higher pay elsewhere.

Of the first 200 awards, more than three-fourths go to young PhDs in the physical sciences and engineering, the fields suffering the most acute shortages of university faculty. After the competition was announced in 1982, a total of 232 PhD-granting institutions submitted 1549 nominations for the 200 awards. A panel of scientists and engineers appointed by the National Science Foundation, which administers the program, culled through the nominees and recommended the winners.

The awards carry an annual base grant from NSF of \$25 000. NSF will provide up to \$37 000 per year to match contributions raised by individual universities from industrial or other private sources. Under the program, NSF has \$6 million in its current fiscal 1984 budget to cover the initial awards, but it may have to ante up another \$12

million to offset the matching money obtained by university fund-raisers. The additional sums, NSF officials admit, will come from the agency's research directorates, meaning that Peter will be robbed to pay Paul.

OSTP and NSF expect another 200 young PhDs will be named each year, so that at the end of five years there will be 1000 well-paid faculty members in the program. Anticipating the next group of 200, NSF already has requested \$23.8 million for the program in its budget for fiscal 1985.

Among the physicists named: Michael F. Paulaitis, University of Delaware; Chang-Tai Chiang, University of Illinois; Thomas F. Rosenbaum, University of Chicago; Asit K. Rau, University of Kentucky; Chris H. Greene, Louisiana State University; Theodore R. Kirkpatrick, University of Maryland; Ellen D. Williams, University of Maryland; Alexander Vilenkin, Tufts; Paul F. Barbara, University of Minnesota; Serge Rudaz, University of Minnesota.

Hoi-Sing Kwok, State University of New York, Buffalo; Clifford R. Pollock, Cornell; Wesley Smith, Columbia; Jon Orloff, Oregon Graduate Center; Eric D. Feigelson, Pennsylvania State University; Paul A. Heiney, University of Pennsylvania; David A. Tirrell, Carnegie-Mellon University; James M. Gaile, Clemson; Harry J. Kimble, University of Texas, Austin.

A. Gordon Emslie, University of Alabama; Simon D. White, University of Arizona; John K. Eaton, Stanford Uni-

versity; Roger W. Falcone, University of California, Berkeley; Reingard L. Genzel, University of California, Berkeley; Robert D. McKeown, Caltech; John P. Preskill, Caltech; Thomas A. Prince, Caltech; Alex Zettl, University of California, Berkeley; Mitchell C. Begelman, University of Colorado; Joseph A. Fisher, Yale University; Marshall B. Long, Yale University; Gregory Baker, University of Arizona; Charles S. Campbell, University of Southern California; Daniel M. Nosenchuck, Princeton University.

Peter B. Armentrout, University of California, Berkeley; Supriyo Datta, Purdue University; Ronald M. Gilgenbach, University of Michigan; James B. Grotberg, Northwestern University; James M. Haile, Clemson University; Jonathan J. Higdon, University of Illinois; Antoine Kahn, Princeton University; Wyn D. Laidig, North Carolina State University; Stephen A. Lyon, Princeton University; Robert R. Lucchese, Texas A&M; G. Paul Neitzel, Arizona State University; Mark A. Prelas, University of Missouri; Robert K. Prud'Homme, Princeton University; Helen L. Reed, Stanford University; L. Rafael Reif, MIT; Peter J. Rossky, University of Texas, Austin; David Rutledge, Caltech; Richard J. Saykally, University of California at Berkeley; James C. Seferis, University of Washington; Terrence J. Sejnowski, Johns Hopkins University; Michael O. Thompson, Cornell University; Nancy S. True, University of California, Davis. —IG □



The new 4-mile ring of superconducting magnets designed to increase the maximum energy of the Fermilab proton accelerator to 1000 GeV (1 TeV, hence the new name "Tevatron"), was ceremonially dedicated on 28 April. Illinois Senator Charles Percy is flanked at the celebration by Fermilab director Leon Lederman (right) and director-emeritus Robert Wilson. The superconducting ring, which doubles the beam energy of the twelve-year-old accelerator, lies directly below the original ring of conventional magnets. Test runs have thus far achieved 80% of the design energy. Eventually the Tevatron will accommodate countercirculating beams of protons and antiprotons, making the Fermilab machine a colliding-beam accelerator with a collision energy of 2 TeV (see PHYSICS TODAY, March, page 17).