

Switzerland, to be taught by a brilliant physicist who had been one of Einstein's closest friends—Konrad Habeth, a member of the so-called Olympia Academy.

Physics frontiers. The final sessions on frontiers in physics ranged from the very small to the very big. Robert B. Laughlin of Lawrence Livermore Laboratory described the theoretical work on the fractional quantum Hall effect. James L. Smith, a fellow at the Los Alamos National Laboratory, followed with a talk about heavy electrons. Smith, contrasting his subject with Laughlin's, emphasized the absence of a credible theory.

Moving to the big, Albert R. Hibbs of the Jet Propulsion Laboratory gave a beautifully illustrated lecture on the Voyager 2 probe of Uranus. Particularly absorbing was his description of how Voyager's navigators overcame various technical obstacles to obtain the superb photographs of Uranus and its moons that they finally got. By the time Voyager reached Uranus, Hibbs said, it was "arthritic, semi-senile and somewhat deaf"—that is, there was a problem with its camera arm, it had lost half its computer memory and, to communicate with one of its radios, transmitters on Earth had to compensate for Doppler effects in advance.

Wallace Broecker of Columbia University and Lamont-Doherty Geophysical Laboratory gave the concluding talk on CO₂ greenhouse effects, which he considers cause for serious concern. Citing evidence from ice borings done in Antarctica by teams from Grenoble and elsewhere, Broecker said that there was no change in the CO₂ composition of the atmosphere until around 1800, when it started to rise steadily. If it were to double in the next century, which seems likely in light of the historical evidence and current environmental trends, the Earth's temperature might increase by 2.5–4.5 °C, Broecker said.

—WILLIAM SWEET

Goldsmith receives AIP science-writing award

Donald Goldsmith, an astronomer who currently works as a tax attorney with Pillsbury, Madison & Sutro in San Francisco, is the 1986 scientist winner of AIP's Science Writing Award in Physics and Astronomy. Each year AIP makes two science-writing awards, one to a scientist and one to a journalist. Goldsmith won the scientist award for his book *Nemesis: The Death Star*, which was published by Walker & Company in New York.

Goldsmith received a BA from Harvard University in 1963 and a PhD in

astronomy from the University of California, Berkeley, in 1969. After postdocs at Berkeley and Stanford University's Institute for Plasma Research, Goldsmith taught at the State University of New York at Stony Brook from 1972 to 1974. After that, while working as a science writer and studying law, Goldsmith held temporary and part-time teaching positions at the University of California campuses in Berkeley, Santa Cruz and Irvine; Stanford University; and Chabot College in Hayward, California. He was a visiting professor at the Niels Bohr Institute in Copenhagen in 1977.

Goldsmith is the author of seven books and the editor of two. He served as a consultant to Carl Sagan's "Cosmos" public-television series, and he has just finished work on a program about the search for extraterrestrial intelligence, which was aired on 18 November, with Lily Tomlin as a narrator.

AIP Executive Director H. William Koch presented the science-writing award to Goldsmith on 22 October at a ceremony during the annual AIP Corporate Associates meeting at Exxon Research and Engineering Company in Annandale, New Jersey. The award consists of a \$1500 check and a certificate.

AAPM chooses Barnes to be president-elect for 1987

The American Association of Physicists in Medicine has chosen Gary T. Barnes as its president-elect for 1987. At the beginning of 1988 Barnes will succeed Paul L. Carson (University of Michigan), who becomes AAPM president at the beginning of 1987.

Barnes is a professor and director of the physics division in the department of radiology at the University of Alabama, Birmingham. He joined the department as assistant professor in 1972 and became associate professor in 1976, director of the physics division in 1976 and full professor in 1981.

Barnes earned his BS in physics at Case Institute of Technology, Cleveland, in 1964. He received a PhD in physics from Wayne State University in 1970. He was a trainee in medical physics at the University of Wisconsin, Madison, in 1971–72, and was awarded a BA in radiological physics in 1976.

Barnes has done research on x-ray image quality, scatter control, mammography, digital radiography and dual-energy imaging.

As an AAPM officer, Barnes would like to improve and publicize the scientific foundation of medical physics with improved documentation and education programs, encourage scientists and engineers to join AAPM and par-



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ticipate in its annual meetings, develop a long-range financial plan, and work with Federal agencies and other scientific societies to obtain recognition of the scientific contributions made by physicists in medicine.

Browder is named outstanding SPS chapter adviser in 1986

The Society of Physics Students has announced that J. Steve Browder, head of the physics department at Jacksonville University, is the recipient of the 1986 Outstanding SPS Chapter Adviser Award. He is to receive the award in a ceremony on 1 December.

Browder received his BA in physics from Rollins College in Winter Park, Florida, in 1961, and earned an MS in 1963 and a PhD in 1967 at the University of Florida. He held a postdoc at the University of Florida in 1968 and taught at Northwestern State University of Louisiana from 1968 to 1971, when he joined the faculty of Jacksonville University.

Browder has served as chapter adviser to the Jacksonville University chapters of SPS and Sigma Pi Sigma since 1971. Under his leadership, the Jacksonville University SPS chapter was the recipient of Outstanding SPS Chapter Awards in 1983–84, 1984–85 and 1985–86.

in brief

The Health Physics Society, which represents professionals in occupational radiation protection, and the National Bureau of Standards have launched a new national program to accredit laboratories that calibrate instruments used to measure ionizing radiation. □