tion against women—which is a problem in itself, the survey report concluded.

Apparently women also experience greater difficulties obtaining research funding. While 48% of men said they had a guaranteed source of funding, only 31% of women said they did. And 28% of women described their sources of research funding as "soft," compared with 20% of men. Despite these disparities, women and men submit papers at about the same rate to the two major AAS journals, the *Astrophysical Journal* and the *Astronomical Journal.*

A summary of the AAS Membership Survey and the raw data can be obtained by contacting AAS, 2000 Florida Avenue NW, Suite 300, Washington DC 20009. —JEAN KUMAGAI

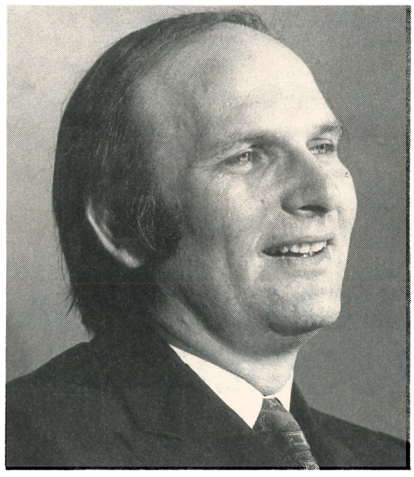
SCHRIEFFER ACCEPTS UNIVERSITY-WIDE POSITION IN FLORIDA

J. Robert Schrieffer, best known for his part in developing the Bardeen–Cooper–Schrieffer theory of superconductivity, has accepted an appointment as University Professor at the University of Florida and Florida State University. In this position, which is the first of its kind in the Florida system, Schrieffer will be affiliated with all nine campuses of the university but will be primarily associated with FSU in Tallahassee and with the University of Florida, Gainesville.

Schrieffer's office will be located at the newly established national magnet lab at Florida State (see PHYSICS TODAY, January 1991, page 53). Schrieffer says he will be "on assignment" at the magnet lab.

In the competition that led to Florida's obtaining the magnet lab, a decisive factor was the level of commitment of the Florida state government and the state university to the lab. Among other things, the state and the university promised to make approximately 34 faculty appointments and 20 visiting appointments in association with the lab, and in due course it came to be understood that four of the faculty positions would be in condensed matter theory.

As part of the agreement that brings Schrieffer to Florida, four additional positions in condensed matter theory are being created at the magnet lab. So, including Schrieffer's University Professorship, the group in condensed matter theory at the lab will have a total of nine members. Not counting Schrieffer, four of the new positions are to be associated



J. Robert Schrieffer

with FSU and four with Gainesville. It is anticipated that half will be senior-level, tenured appointments, and the other half junior, tenure-track appointments.

A search for people to fill the positions in condensed matter theory is being conducted by a committee that includes four representatives from FSU, four from Gainesville and two from Los Alamos National Laboratory. LANL is responsible for overseeing the magnet lab in association with Florida State and the University of Florida, under contract to the National Science Foundation.

Hans-Jorg Schneider-Muntau, currently chief engineer at the Grenoble magnet lab—a joint operation of Germany's Max Planck Institute for Solid State Research and France's CNRS—joins the magnet lab in Florida on 1 October. John Miller, head of the superconductivity group at Lawrence Livermore National Lab, will move to Florida later this year. Jack E. Crow, the FSU solid-state physicist who is believed to be on the verge of being named director of the magnet lab, expresses confidence that some other distinguished scholars will accept positions at the lab soon. Schrieffer is due to arrive at the magnet lab on 1 January next year.

Schrieffer leaves a professorship at the University of California, Santa Barbara—having served there as director of the NSF-supported Institute for Theoretical Physics—and a part-time position at Los Alamos as director of the advanced studies program in high-temperature superconductivity theory. (The Los Alamos program is to be dissolved as an independent effort and will be incorporated into a broader program devoted to heavy-fermion strongly correlated materials, Schrieffer says.) Schrieffer also leaves a regular consultancy with IBM Almaden.

KECK FOUNDATION FUNDS DUPLICATE OF KECK TELESCOPE

On 26 April the W. M. Keck Foundation announced its grant of $74.6 million toward the construction of a second 10-meter, segmented-mirror telescope on Mauna Kea in Hawaii, which will be a clone of the telescope currently nearing completion there. When it was decided six years ago to build the first Keck Telescope using segmented-mirror technology developed by Jerry Nelson at Lawrence Berkeley Laboratory, a large measure of technical risk was involved. The technology had never been demonstrated at a true prototype scale, and there were powerful arguments in favor of alternative technologies (see PHYSICS TODAY, February 1985, page 71). The decision by Keck to fund a clone represents an expression of confidence in the telescope nearing completion, obviously, as well as a big leap forward in viewing potential.

Operated as an optical or infrared interferometer, the twin telescopes will provide a resolution equivalent to that of a telescope with a 85-m mirror, according to Edward C. Stone, the director of the Jet Propulsion Laboratory and a vice president of Caltech. Stone, who serves as chairman of the board of the California Association for Research in Astronomy, says that the instrument will have the power to identify the presence of a warm Jupiter-sized body in orbit around any of the nearest 100 stars. (CARA is a partnership established by Caltech and the University of California to build and operate the Keck telescope, which originated as a University of California project and only turned into a joint partnership when Caltech came into the game in late 1985 with backing from the Keck Foundation.)

William R. Frazer, senior vice president for academic affairs for the University of California, remarked casually not long after the first Keck telescope was launched that he hoped he would have the good luck to be in some other job by the time the telescope was completed, in case it turned out not to work. At it happens, the initial telescope was demonstrated successfully with nine mirrors at the end of last year, and the complete set of 36 parabolic segments is to be installed by early next year. Nelson has exuded confidence all along: Six years ago he told PHYSICS TODAY that building the telescope would be "just like paving your bathroom floor." He says now that polishing the mirrors, not making the instrument's novel

servomechanism work, has proved to be the most challenging part of the job. (For details on the polishing technique, see the article by Buddy Martin, John M. Hill and Roger Angel in PHYSICS TODAY, March, page 22.)

The cost of the first Keck telescope initially was estimated at $87 million and in fact the telescope will have cost a total of about $93 million by the time the project is completed. The estimated cost of the second telescope also is $93 million, of which the new grant from the Keck Foundation is expected to provide up to 80%.

Construction of a second telescope was anticipated as a possibility from the outset, and a tunnel linking the two telescope platforms already is built. The link between the two will be optical.

UTRECHT THEORY TEAM REORGANIZED AS THEORY INSTITUTE

In a ceremony held on 19 April the physics theory group at the University of Utrecht formally celebrated its reconstitution as an Institute of Theoretical Physics, an elevation of status that makes the institute more independent of the university's physics faculty and that repositions it to better seek funding both from the Dutch government and the European Community.

Starting with Hendrik Kramers, the close collaborator of Bohr and Heisenberg who taught at Utrecht from the mid-1920s to the mid-1930s, the university has been closely associated with evolution of modern physics. The current theory group was founded in the mid-1950s by the late Leon Van Hove, whose goal was to do research from a very broad disciplinary perspective. (Van Hove himself made important contributions to condensed matter physics in its early days, but by the 1960s, when he became theory director at CERN, he was an important name in particle physics.) In 1971 the young Gerard 't Hooft, a student of Martinus Veltman at Utrecht, published papers showing that the non-Abelian gauge theories developed by Steven Weinberg and Abdus Salam could be renormalized.

'T Hooft is currently a faculty member at Utrecht and will serve as director of the advisory board to the institute. The institute's director is Hans van Himbergen, who earned his PhD at Utrecht in 1976 and who has been a member of the Utrecht faculty since 1981. Van Himbergen's ambition is to make Utrecht's Institute of Theoretical Physics Europe's counterpart to the NSF-supported theory institute at Santa Barbara, which has four professorships and sponsors a large visitor program.

The Utrecht institute has 8 permanent staff members (including 't Hooft), 13 graduate students and 5 postdocs. About one-third of its funding comes from Holland's equivalent of NSF, and two thirds from the university. The institute's improved status means its personnel and budget are guaranteed for five years. The Kramers Chair, for short-term visitors, has been reinstated after a lapse of a decade, and the postdoc program has been expanded. It is hoped that there will be enhanced opportunities for participation in European Community programs such as Erasmus, which subsidizes graduate study outside home countries, and for the creation of more ambitious visitor programs.

LANGENBERG IS ELECTED APS VICE PRESIDENT

Donald N. Langenberg was elected vice president of APS in a special election held earlier this year. Langenberg succeeds Ernest M. Henley (University of Washington), who became president-elect following the resignation of Walter E. Massey to head the National Science Foundation. Langenberg will become APS president in 1993.

Langenberg received a PhD in physics from the University of California, Berkeley, in 1959. The following year he joined the physics faculty at the University of Pennsylvania.

Donald N. Langenberg

He served as deputy director of NSF from 1980 to 1982 and as chancellor of the University of Illinois, Chicago, from 1983 to 1990. Last year he became chancellor of the University of Maryland.

Langenberg's research has included cyclotron resonance and Fermi surface studies of metals and semiconductors; investigations of tunneling and Josephson effects in superconductors; and low-temperature physics. He is a member of the APS division of condensed matter physics, and was the division's chair in 1978. He is also a past president of the American Association for the Advancement of Science.

PETIT WINS 1991 AIP SCIENCE WRITING AWARD

Charles W. Petit, a science writer for the *San Francisco Chronicle*, is this year's winner of the award given by the American Institute of Physics for science writing by a journalist. Petit was selected for his article "Vanishingly Close to Absolute Zero," published in the winter 1990–91 issue of *Mosaic* magazine, a publication of the National Science Foundation. The article described research on quantum mechanical properties at extremely low temperatures, especially in superfluid helium.

After receiving a bachelor's degree in astronomy from the University of California, Berkeley, in 1968, Petit worked as a reporter for the *Livermore Herald and News*. He has been at the *San Francisco Chronicle* since 1972. (Petit described his experiences as a newspaper reporter covering physics and astronomy in PHYSICS TODAY, November 1990, page 35.)

The award, which consists of $3000 and an inscribed Windsor chair, was presented to Petit at the spring meeting of the American Physical Society in Washington, DC. Warren Kornberg, editor of *Mosaic*, received a certificate for publishing the award-winning article.

IN BRIEF

The Foundation for Research and Technology–Hellas has established a special fund of 100 000 European Currency Units to support two international prizes: the Xanthopoulos Prize in Relativity, which will be given every odd year, and the Pnevmatikos Prize in Solitons and Related Non-Linear Phenomena, to be given in every even year. ■