the Carnegie Institute in Pittsburgh. It is unfortunate that no major university in the US took advantage of the great opportunity to add this great man to its faculty. Stern's stay in Pittsburgh was not a happy one, and he went into premature retirement at a time when his powers were still great.

His personality did not lend itself to intimacy. A bachelor, he lived alone, but was not what one would call a "loner." Although he cherished his privacy, he could also be excellent company, highly cultivated, liberal, and very much aware of what was happening in the world. Stern was one of the antistuffy generation of German professors who observed with a mixture of amusement and contempt the pomposity of their predecessors. This is not to suggest that they had gone very far down the road to the informality of the current American style. He was a passionate reader of newspapers but shunned publicity of any kind. A candidcamera picture of Stern would show him either buying or reading a newspaper. Somewhat surprisingly he was an avid devotee of the cinema, although he needed Pauli to remind him of what picture he had already seen. It is perhaps symbolic that he was finally stricken in a movie theatre.

Every German professor had his own well known eccentricity that was cherished by his colleagues; he in turn was expected to live up to this reputation. Stern's was a love of luxurious hotels, good food and first-class railroad accommodation. We always knew at what time he would arrive from his holidays by looking up the best train. He avoided walking when he could ride. From his laboratory to the resturant that we frequented for lunch was a matter of about four or five blocks, an easy walk for the rest of us. But Stern, only 39 or 40, always took the street car although it involved a transfer to another line.

Never in robust health, Stern was inclined a bit to hypochondria, but nevertheless he spent long hours in the laboratory. His manipulative skills were only fair, and his assistants often felt that progress would improve if he devoted more time to writing. On the other hand he was very inventive, ingenious and bold in overcoming experimental difficulties. though not unaware of his own great contributions, he was generous in his evaluation of the work of others. He was open to new ideas both in theory and in experimental techniques, as one would expect from one who had a long association with Einstein.

As I look back on the last 30 years or more, I feel extremely regretful that Stern's scientific personality did not make its proper mark on generations of American graduate students. His qualities of physical insight into basic theoretical questions were rare. He

valued experiment not only for the direct result but also for style, the "Witz," the clever and ingenious strategem or invention that has the quality of grace and beauty that link the researcher to the artist rather than to the craftsman. In this day of vast machines, highly organized researches and a widening gulf between theory and research, the qualities that were so great in Stern must assume a greater importance if physics is to remain an adventure of the human spirit.

ISIDOR I. RABI

#### King, Head of Purdue Dept. Of Physics, Dies at 45

Richard W. King, head of the Purdue University physics department, died after heart surgery on 12 Aug. at St. Mary's Hospital, Mayo Clinic. He was 45 years old.

King had been a Purdue physics faculty member since 1955 and a full professor since 1961. His primary research interest was in nuclear physics, most recently in the theory of elementary particles. He had been a consultant to various federal agencies and to industry. Before joining the Purdue faculty he was a nuclear physicist with Nuclear Development Associates, White Plains, N. Y. and the National Research Council—National Academy of Sciences.

### Science Writing Award Goes To Kip S. Thorne of Cal Tech

The 1969 winner of the American Institute of Physics-US Steel Foundation Science Writing Award is Kip S. Thorne, associate professor of theoretical physics at Cal Tech. He



THORNE

is the first scientist to be named winner of this prize, which is offered to "stimulate distinguished reporting and writing of advances in physics and astronomy." H. William Koch, director of AIP, was scheduled to present the award to Thorne at the annual meeting of society officers and Corporate Associates of the AIP at The Rockefeller University on 30 Sept. He will receive a check for \$1500, a citation and a symbol of the award.

Thorne won the award for his article on "The Death of a Star," which appeared in the 1968 edition of Science Year, published in Chicago by the Field Enterprises Educational Corp.

Recent changes in the physics department of the University of Pennsylvania, Philadelphia, are: Max E. Caspari has accepted the position of chairman; Ole Hansen, a visiting professor last year, has been appointed a full professor; A. Brooks Harris and Gino Segre have been promoted to associate professor; William E. Stephens, acting dean of the College of Arts and Sciences last year, has been appointed to that position; and Enos E.

Witmer, a faculty member since 1928, was appointed Emeritus associate professor.

Luke W. Mo, formerly at the Stanford Linear Accelerator Center, is now assistant professor of physics at the University of Chicago.

Gordon B. Gaines has been named chief of electronic materials and devices research at Battelle Memorial Institute.

Leland Haworth, retired director of the National Science Foundation, has joined Associated Universities, Inc as special assistant to the president and special consultant to the director of Brookhaven National Laboratory. Haworth was originally with BNL in 1947 as assistant director of special 1. resistance to change; permanence. 2. the state or quality of being stable or fixed; steadiness.

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projects, and President Kennedy appointed him a member of the US Atomic Energy Commission in 1961 and director of NSF in 1963.

Alexander H. Flax is the new president of the Institute for Defense Analyses, effective 1 Sept. He is replacing Gen. Maxwell Taylor, who is retiring. Flax, Chief Scientist for



FLAX

the Air Force from 1959-61 and assistant secretary of the Air Force for research and development from 1963-69, joined IDA as vice president for research in the early part of this year. He has a physics PhD from the University of Buffalo.

J. P. McKelvey, professor of physics at Pennsylvania State University, has been appointed assistant to the dean of the College of Science.

New members of the department of physics and astronomy at the University of Kansas, Lawrence, are: Ray G. Ammar, formerly of Northwestern University, as professor; Hermann Munczek, formerly of Northwestern, as associate professor; William Silvert, formerly of Case Western Reserve University, Robert Bearse, formerly of Argonne National Laboratory, Deok Kyo Lee, formerly of the University of California, Berkeley, and John T. Ritter, formerly of the J. J. Thomson Physical Laboratory, Berkshire, UK, as assistant professors.

Robert Gould has recently joined the research staff at AeroChem Research Laboratories Inc., Princeton.

The National Radio Astronomy Observatory has awarded the Fourth Karl G. Jansky Lectureship to Fred Hoyle, Plumian Professor of Astronomy and Experimental Philosophy, of Cambridge University.

Robert A. Walkling, formerly assistant professor at Bowdoin College, is now an associate professor of physics at the University of Maine, Portland.

At Case Western Reserve University Arthur H. Benade and Thomas G. Eck have been promoted to professor of physics; Chao-Yuan Huang, Paul B. Kantor and Harvey S. Leff have been promoted to associate professor.

Kurt S. Lion, professor of applied biophysics, Philip M. Morse, professor of physics, and Cyril S. Smith, Institute Professor, have retired from MIT.

New appointments to the department of physics and astronomy at the University of Massachusetts, Amherst, are: to professor, David R. Inglis, formerly of Argonne National Laboratory; to associate professor, Robert A. Guyer, of Duke University, Francis Pichanick, of Yale, and Claude H. Schultz, of Columbia; to assistant professor, William I. Gerace, of Princeton, Joseph W. Kane, of Cornell, and Joseph H. Taylor, of Harvard. The following have received promotions: to full professor, William M. Irvine; to associate professor, Frederick W. Byron Jr, Wilfred E. Cleland, Norman C. Ford, Richard R. Kofler, Claude M. Penchin and Kandula S. R. Sastry. Edgar Everhart, from the University of Connecticut, is now professor of physics at the University of Denver; Tonis Oja, from Brown, and Dennis S. Peacock, from Imperial College, London, are assistant professors. Recent promotions are Lawrence P. Horwitz to professor of physics and mathematics, David G. Murcray to professor of physics and Steve H. Carpenter to associate professor of physics

Fred A. Otter, formerly of United Aircraft Research Laboratories, has been appointed professor of physics at Clarkson College of Technology, Potsdam, N. Y. Aaron Rotsstein, formerly visiting assistant professor at McGill University, is now assistant professor at Clarkson.

Thomas Stevenson Smith, provost and professor of physics at Ohio University, Athens, has been elected president of Lawrence University in Appleton, Wisc.

The new dean of Yeshiva University's Belfer Graduate School of Science is Arthur B. Komar, a physicist engaged in general-relativity research. His bachelor's and PhD degrees are from Princeton, and he has been a faculty member of the Belfer school since 1963.

Glen A. Graves, staff member at the

Los Alamos Scientific Laboratory, is on leave to head the physics section of the division of research and laboratories, International Atomic Energy Agency, Vienna.

Kathryn A. McCarthy, professor of physics, is the first woman to be named dean of the Tufts University Graduate School of Arts and Sciences in the post's 67-year history.

Bernard T. Murphy has been promoted to head of the Exploratory Device Department at Bell Telephone Laboratories.

Peter L. Bender, known for his work on the use of lasers for precise measurement and for his studies of fundamental constants, has been elected chairman of the Joint Institute for Laboratory Astrophysics for a term ending January 1972. Bender, who has been with the National Bureau of Standards since 1956, is one of the principal investigators on the laser retroreflector experiment set up by the Apollo 11 astronauts. Bender replaces Lewis Branscomb, who is to be director of NBS.

Benjamin B. Snavely has been appointed to head the solid-state and molecular-physics laboratory of Kodak Research Laboratories. He succeeds Donald C. Hoesterey, who will spend the 1969–70 year at Cal Tech. John L. Tupper has retired as assistant head of the physics division. He was with Kodak for 33 years.

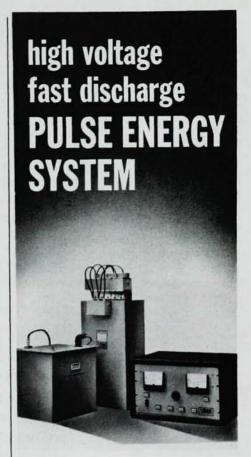
Barclay J. Tullis, who recently received the PhD degree from Stanford University, has joined Optics Technology, Inc, Palo Alto, Cal, as a senior research physicist.

Clarence E. Larson, president of the nuclear division of Union Carbide, was sworn in to a five-year term on the US Atomic Energy Commission 2 Sept. He replaces Francisco



LARSON

Costagliola, a naval officer who served on the AEC for one year. From 1950 to 1956 Larson was director of the Oak Ridge National Laboratory, which he originally joined in 1943. He had been with Union Carbide since 1965.



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