



PAUL S. EPSTEIN

(1883-1966)

Paul Sophus Epstein, professor emeritus of theoretical physics, died at his home in Pasadena on February 8. He was 83 years old.

"The death of Professor Epstein marks the ending of an era at the California Institute," said President Lee A. DuBridge. "A distinguished theoretical physicist, he played an influential part in the foundation of the present physics division. From his arrival in 1921 until his retirement as professor emeritus in 1953, several generations of Caltech students were guided and inspired by his warm and vital interest in his field and in their lives. He occupies a special place in the history and progress of the Institute."

Paul Epstein was born in 1883 in Warsaw. He was graduated from the Imperial University of Moscow in 1906, and in 1909 got the equivalent of a PhD, becoming assistant professor of physics there. A year later he went to Munich, where he studied the theory of electromagnetic waves, in particular the theory of diffraction, with Arnold Sommerfeld. In 1919 he went to Zurich University where he submitted a paper on the theory of the Stark effect as his thesis for an appointment as assistant professor of physics. He was at Leyden University as assistant to H. A. Lorentz when he met R. A. Millikan, who was scouting for Caltech personnel, and in 1921 he came to Caltech. Epstein's work from about 1910 to 1920 in the development of quantum mechanics,

with that of Sommerfeld and Niels Bohr, was an important contribution to the development of atomic theory.

At Caltech he began by teaching all phases of theoretical physics, but eventually confined his teaching to thermodynamics and statistical mechanics. His work led him to areas of applied theoretical physics, which occupied most of his Caltech career. Among his later contributions were studies of electromagnetic waves around the earth, the stability of air bubbles in water, and the theory of absorption and scattering of sound waves in the atmosphere. During the war he studied the absorption and scattering of sonar waves in the ocean.

Dr. Epstein was a member of the National Research Council from 1928-30, a member of the National Academy of Sciences, a fellow of the American Physical Society, of the American Association for the Advancement of Science, and of the Société Française de Physique. His broad interests ranged over the fields of art, music, history, and psychoanalysis, and his friends included such men as the artists Paul Klee, Vassily Kandinsky, and Franz Marc. He was also a friend of the distinguished psychiatrist Sigmund Freud. He was a trustee of the Psychoanalytic Institute of Los Angeles, a board member of the Psychoanalytic Study Group of Los Angeles, and he had been a member of the Coleman Chamber Music Association of Pasadena since 1921.