

London Award to Leggett, Reppy and Rudnick



LEGGETT



REPPY



RUDNICK

Anthony J. Leggett, John D. Reppy, and Isadore Rudnick will share the eleventh Fritz London Memorial Award "in recognition of outstanding contributions to research in low temperature physics." Leggett is recognized for his contribution to the theory of Fermi liquids; Reppy for his experimental work on liquid helium; and Rudnick for his experimental use of acoustic techniques in research on liquid helium both in bulk and in films. The award, first given in 1957, has been presented in the past to such distinguished recipients as Nobel laureates Lev D. Landau, John Bardeen and Brian Josephson.

Leggett was cited for "his outstanding theoretical contributions to our fundamental knowledge of Fermi liquids (in particular his theory on the thermodynamic and magnetic properties in the superfluid phase of He^3), of collective excitations and of strongly coupled superconducting systems." He received his PhD from Oxford in 1964 and has been affiliated with the University of Sussex since 1967, and is a Fellow of the Royal Society. His achievements include the prediction of the nuclear magnetic properties in both normal and superfluid He^3 and prediction of the properties of superfluid phases in He^3 .

Reppy was cited for "his outstanding

experimental contributions to our fundamental knowledge in fluid helium. His elegant and extremely precise techniques with the superfluid gyroscope and the torsional oscillator have led to important discoveries and clarifications on the nature of the superfluid phase of He^4 films, bulk He^4 and He^3 and especially of their superfluid transitions." Currently professor of physics at the Cornell University Laboratory of Atomic and Solid State Physics, he formerly taught at Yale University, where he received his PhD in 1961. His discovery of a tricritical point (in He^3 - He^4 mixtures) had a tremendous impact on the science of critical phenomena; his measurements of the density and anisotropy of superfluid He^3 clarified the nature of this phase; and his studies of thin films of superfluid He^4 helped confirm the Kosterlitz-Thouless theory for a two-dimensional transition.

Rudnick was cited for "his outstanding experimental contributions to our fundamental knowledge in bulk liquid helium and in helium films by means of a wide range of highly sophisticated acoustic techniques that were particularly important for understanding the superfluid phase transition of He^4 in two and three dimensions, superfluid critical velocities and persistent currents." Rudnick received his PhD in

1944 from the University of California in Los Angeles, where he has been professor since 1948. He discovered that the superfluid density of He^4 in films remains finite at the superfluid transition temperature, T_λ ; he measured the speed and attenuation of sound in He^4 in bulk and in thin films near T_λ ; and he discovered "fourth sound" in superfluid He^4 .

AAPM presents Coolidge Award to Kereiakes

The 1981 William D. Coolidge Award was presented recently to James G. Kereiakes at the annual meeting of the American Association of Physicists in Medicine. The award, the association's most prestigious, is named for the inventor of the Coolidge x-ray tube and honors a member of the AAPM who has established a distinguished career in medical physics through contributions to teaching, research, publications, clinical service and scholarly societies.

Kereiakes is professor of radiology at the College of Medicine of the University of Cincinnati where he received his PhD in physics in 1950. During the course of his career he has initiated unique training programs in radiological physics, radiology administration,