

Hubbard Hamiltonian, the Hubbard Model, the Mott-Hubbard transition have become part of the jargon of physics. His work on electron correlation in narrow energy band solids has been described by Walter Kohn as "the basis of much of our present thinking about the electronic structure of large classes of magnetic metals and insulators."

Hubbard made a few other excursions to the United States. He spent summers at Brookhaven National Laboratory in 1963 and 1969, and he was a visiting professor at Brown University in 1970. In 1976, he joined the staff of the IBM Research Laboratory in San Jose. At IBM, Hubbard continued his fundamental work on many-body theory, including work on quasi-one-dimensional conductors. In addition to his basic research, he made applied contributions to the modeling of magnetic recording and provided the theoretical foundations for the experimental activities in phase conjugate optics and neutral-to-ionic phase transitions. In 1978, Hubbard resolved the theoretical problem that occupied him most of his scientific career, namely, the development of a first-principle theory of the magnetism of iron. The reconciliation of the localized and itinerant models of the magnetism of iron into a single model that can yield reasonable values of both the magnetic moment and the Curie temperature has been an outstanding physics problem for over 40 years. Hubbard and others had the correct physical picture as far back as 1960, but it remained until 1978 for Hubbard to provide the mathematical solution to resolve this difficult problem. Subsequent calculations by Hubbard and others have confirmed his solution.

Hubbard enhanced the work of his colleagues enormously, both by his positive suggestions and because of his insistence on carefully examining all assumptions. A patient and helpful collaborator, he will be greatly missed by the physics community, especially by his coworkers.

GEORGE CASTRO
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George L. Jenkins

George L. Jenkins, professor of physics and chairman of the department of Stetson University, died 8 June 1980. He was educated at Berea College (AB 1943), University of North Carolina (MS 1947), and the University of Kentucky (PhD 1947). He was instructor of physics at the University of North Carolina from 1945 to 1948, when he became associate professor at Stetson. □



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