

John A. Hertz Biography

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John Atlee Hertz Jr. (January 10, 1945—) was born in Bethlehem, Pennsylvania, USA, the son of John Atlee Hertz Sr., then English faculty at Lehigh University and later university administrator, and Eleanor West, a biology researcher at Lehigh and later faculty at Marywood College.

Hertz attended Choate-Rosemary Hall School, a private residential school in Connecticut, before joining Harvard (1962-1966), where he obtained a BSc in Physics. He then pursued graduate studies at the University of Pennsylvania, obtaining a PhD in physics (1970) for a thesis entitled “Dynamical scale invariance in itinerant electron ferromagnet”, under the supervision of Robert Schrieffer. After a postdoctoral year at Penn, Hertz went to work with Phil Anderson in the Cavendish Laboratory, at Cambridge (1971-1973). He then joined the University of Chicago faculty as assistant professor (1973-1980). In 1980, Hertz moved to Copenhagen to take up a professorship at Nordita, and in 2007 he also became professor at the Niels Bohr Institute. He is now emeritus.

Hertz was trained as a theoretical condensed matter physicist through first the consideration of superconductivity and then of itinerant magnetism. He came in contact with spin glasses at Cambridge, and later worked on their dynamical description. Starting in the mid-’80s, he studied artificial and later biological neural networks. At Richard Palmer’s invitation, Hertz took a sabbatical at Duke spring 1988, which led him to co-author the seminal book *Introduction to the theory of neural computation* (1991). With Konrad Fischer, he also wrote *Spin Glasses* (1993), one of the first comprehensive monographs on the topic. Hertz was notably the Scandinavian representative on the *Statistical physics of glassy and non-equilibrium systems (SPHINX)* network funded by the European Science Foundation (1999-2004).

Hertz was an Alfred P. Sloan Foundation fellow (1974-1977).