

John Richard Reitz (1023-2014)

John R. Reitz died in Ann Arbor, Michigan, on July 29, 2014, at age 91 after a long and productive life as a theoretical physicist, a career that allowed him to combine his interest in the natural world with his love of mathematics.

John was born on February 7, 1923, in Cleveland, OH, to John Christopher and Irma Reitz (nee Volk). John's father was educated as an engineer at Case Institute of Technology and worked in the German community on the western edge of Cleveland as a surveyor and small businessman. John and his younger brother Robert also went to Case, where John graduated in 1943 with a major in physics. His brother Robert was influenced by his example to major in physics, and ultimately became a professor of physics at Carleton College.

John spent the World War II period at Harvard Underwater Sound Laboratory where he designed and tested underwater acoustic equipment as one of a large number of young physicists recruited to support the war effort. John received his Ph.D. in physics from the University of Chicago in 1949 with a thesis based on calculations of atomic electron wave functions done under the supervision of Edward Teller.

John spent 1949-1952 at the Los Alamos Scientific Lab where he worked on the properties of materials at high temperatures and became interested in the field of solid-state physics. He then joined the Office of Naval Research in London, England, and did scientific liaison work in Europe, where he was able to expand and update his knowledge of solid-state physics through his contacts with many European universities.

In 1954 John joined Case Institute of Technology as a physics professor and remained there for the next 10 years. In his academic research, he devoted himself especially to problems of solid-state physics. In 1960 he and Fredrick Milford published *Foundations of Electromagnetic Theory*, now in its 2008 4th edition, that has been a standard textbook on the subject for more than 50 years.

In 1964 John joined Ford Motor Company as manager of the Physics Department in the Ford Scientific Laboratory, an organization that strongly supported research ranging from general relativity and non-linear optics to electronic engine control, air-fuel ratios, and magnetic levitation for high-

speed ground transportation. In those days the Ford Scientific Laboratory ranked with Bell Labs-Murray Hill, Xerox-Palo Alto, and IBM-Yorktown Heights as one of the jewels in the former crown of US industrial research laboratories that had encouraged its scientists to study fundamental issues along with their attack on immediate industrial problems.

After his retirement in 1986, John continued to do fundamental research in physics and astrophysics with a colleague, Frederick Mayer. Since 2011, they have published several papers exploring the possibility of a small, tightly-bound composite particle they named the *tresino* and the ways this new particle could explain a number of important puzzles in physics and cosmology involving such phenomena as cold fusion, the heat generated in the earth, and dark matter. The most recent of these papers was accepted for publication just days before John died.

John married Patricia Ann Firestone in 1947 while he was a Ph.D. student at Chicago, and they had four sons. John was devoted to his family, sharing with his sons his wide interests in fishing and camping, natural history, languages, music, and art. He was proud of the fact that he had taken each of his sons on a Canadian canoeing and fishing trip, as his father had taken him. He pursued his interest in oil painting throughout his life and in his retirement continued his study of Spanish. While his sons were in Boy Scouts, he served as an adult leader. He and Patricia were members of First Congregational Church in Ann Arbor, where he served as a deacon. He was preceded in death by his wife Patricia and is survived by his brother Robert (Joan) of Northfield, MN, and John and Patricia's four sons and their families: John Christopher (Sharyn) of Iowa City, IA, and their two sons, Christopher and Benjamin; Ralph (Lisa) of Buchanan, MI, and their children, Nathan, Katie, and Sebastian; James (Melissa) of Ann Arbor and their children, Natalie and Duncan; and Howard of Ann Arbor.

Gifts in John's memory can be made to the Department of Physics of Case Western Reserve University. Donations can be made on line (www.case.edu) or by check (Case Western Reserve University, Attn: Advancement Services, 10900 Euclid Ave., Cleveland, OH 44106-7035).

Adapted from the obituary written by Frederic J. Mayer and Frederick J. Milford