

CURRICULUM VITAE

Robert Graham Hamish Robertson

Hamish Robertson was born in Ottawa, Canada in 1943 and attended schools in Canada and England. He took his undergraduate degree at Oxford and the Ph.D. at McMaster University in 1971 in atomic-beam and nuclear-structure physics. He went to Michigan State University as a postdoctoral fellow and remained on the faculty, becoming Professor of Physics in 1981. In 1976 he received an Alfred P. Sloan Foundation Fellowship. His research at Michigan State resulted in the first observation of an isobaric quintet of states in nuclei. In addition, he carried out experiments on parity violation, nuclear astrophysics and nuclear reactions. A long-standing question as to whether ${}^6\text{Li}$ is mainly primordial or a relatively recent product of astrophysical processes was settled in favor of the latter by a sensitive measurement of the capture of deuterium by helium-4.

In 1981 he joined Los Alamos National Laboratory, and investigated neutrino mass via tritium beta decay and solar neutrino physics. The experimental limit on the mass of the electron neutrino resulting from that work showed that the particle, present in the Universe since the big bang in vast numbers, was nevertheless not sufficiently massive to close the Universe gravitationally. He was appointed a Fellow of Los Alamos National Laboratory in 1988, and initiated the Laboratory's collaboration in the Sudbury Neutrino Observatory project. He was US co-spokesman and (for 2003-4) Scientific Director of SNO. Results from this experiment have shown that electron neutrinos are strongly mixed in flavor and are a superposition of neutrino states with mass, in contradiction to the Standard Model of particle physics. SNO and Super-Kamiokande were honored in 2015 by the award of both the Nobel Prize in Physics and the Breakthrough Prize in Physics to A. McDonald and T. Kajita.

Robertson took a Professorship at the University of Washington in 1994, continuing his work in neutrino physics and receiving, in 1997, the APS Tom W. Bonner Prize. He is a Member of the Canadian Association of Physicists, Member of the IEEE, a Fellow of the Institute of Physics (London) since 1998, a Fellow of the American Physical Society since 1982. In 2003 he was elected to Fellowship in the American Academy of Arts and Sciences and in 2004 to the National Academy of Sciences. In 2008 he was appointed to the endowed Boeing Distinguished Professorship at the University. In 2015 he shared in the award of the Breakthrough Prize in Physics and in 2017 received an honorary DSc from McMaster University. On sabbaticals and leaves, he has visited Princeton University, Argonne National Laboratory, and Chalk River Nuclear Laboratories. He has chaired the Nuclear Science Advisory Committee and the Division of Nuclear Physics of the APS. A past member of the Board of Physics and Astronomy of the National Research Council, he has also served on NRC Nuclear Physics and Neutrino Astrophysics Panels, the APS-DNP Executive Committee and Program Committee, the APS Bonner Prize and Bethe Prize Committees, the NSERC (Canada) Grant Selection Committee, the Editorial Board of Physical Review D and Annual Reviews of Nuclear and Particle Science, and review panels for the National Science Foundation and the Department of Energy. Robertson retired in 2017, becoming Professor emeritus at the University of Washington.

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