# R. F. O'CONNELL
Brief Vita (May, 2018)

R. F. O'Connell was born in Athlone, Ireland, in 1933.  He received a B.S. (1953) from the National University of Ireland (NUI) and then worked as an instructor at NUI, Galway (1954) and as a Telecommunications Engineer with the Irish government (1954-1958).  He received a Ph.D. degree in theoretical physics from the University of Notre Dame in 1962, and a D.Sc. degree from the NUI in 1975.  His Ph.D. thesis research was concerned with Coulomb field effects on both muon decay and internal conversion processes.  Before joining Louisiana State University in 1964, he worked at the Dublin Institute for Advanced Studies and at IBM (Ireland).

From 1966 to 1968, he was a NAS-NRC Senior Research Associate at the Institute for Space Studies, New York.  He was visiting scientist at Cambridge University in 1970, the University of Paris XI in 1975, and the International Centre for Theoretical Physics, Trieste, in 1976.  He was also an SRC Senior Visiting Fellow at the Universities of Oxford and London (Queen Mary College) in 1976. He spent several sojourns as a visiting scientist at the Dublin Institute for Advanced Studies; the Max-Plank Institute for Quantum Optics, Munich; University of Ulm, Germany; the Laboratoire Aimè Cotton, France; Universidade Federal De Santa Catarina, Florianopolis, Brazil; Technical University of Denmark; and Bilkent University, Ankara, Turkey.

He collaborated on the first complete post-Newtonian solution to the gravitational two-body problem with spin obtaining results which are crucial in analyzing the general relativistic precession of the rotation axes  in binary star systems, leading to a new prediction in General Relativity, which was recently verified by a consortium of astronomers. He was a member of the group that deduced that the Greenwich white dwarf star has a magnetic field of 300 MG, simultaneously explaining the origin of the Minkowski bands.  With G.W.Ford, he provided a simple solution to a long-standing problem (runaway solutions) in both quantum and classical electrodynamics.  His current research interests include quantum stochastic physics, quantum optics, and general relativity.  He has published 326 papers in major refereed journals.

A Fellow of the American Physical Society (since 1969), he is also a member of the International Astronomical Society. He is a Board Member of the Hadronic Journal and formerly a Board Member of *Physical Review A*. He is also on the Advisory Board, Journal of Physics A: Mathematical and General.  At present he is a Boyd Professor Emeritus and Professor of Physics, Emeritus at Louisiana State University, where he has been on the faculty since Jan. 1964. On April 20, 2018, he was inducted into the College of Science, LSU Hall of Distinction.