PHYSICS
COLORADO STATE UNIVERSITY

CSU PHYSICS COLLOQUIUM

"Neutrino Oscillations"

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Monday May 6th, 2019 at 4:00pm
120 Engineering (Hammond Auditorium)

Abstract

Of the fundamental particles of nature, neutrinos are the least understood. Much, but not all, of what we want to learn about them can be obtained from the study of their peculiar habit of morphing from one species to another as they travel. I will describe what we have learned so far and prospects for the future.

Biography

Gary J. Feldman received his B.S. degree in physics from the University of Chicago in 1964. A student of the late Francis Pipkin, he earned his Ph.D. degree in physics from Harvard University in 1971. His Ph.D. thesis was on a measurement of the size of the π meson by means of pion electro-production. After receiving his Ph.D. degree, Feldman held a series of positions at the Stanford Linear Accelerator Center at Stanford University. In 1990, he moved to Harvard University where he was a Professor of Physics from 1990 to 1992, and was named Frank B. Baird, Jr. Professor of Science in 1992. While at Stanford, Feldman's research concentrated on the physics of electron -positron annihilation at high energy. He co-authored papers that led to two Novel Prizes in Physics: the discovery of the Ψ meson (Burton Richter, 1976) and the discovery of the τ lepton (Martin Perl, 1995). More recently, Feldman's research has involved the study of neutrino oscillations with the NOMAD, MINOS, and NOvA experiment. He was the co-spokesperson of the NOcA experiment from 2005 to 2015. In retirement, he continues as an active member of the NOvA experiment. Feldman was co-director of the SLAC Summer Institute on Particle Physics for more than a decade. He was co-chair of the 26th International Conference on Neutrino Physics and Astrophysics (Neutrino 2014) and co-director of the SLAC Summer Insitute on Particle Physics for more than a decade.