

November 2008

Curriculum Vitae
John Gregory Learned

degrees:

A.B. Columbia University, 1961, New York, NY.
M.S. University of Pennsylvania, 1963, Philadelphia, PA.
Ph.D. University of Washington, 1968, Seattle, WA.

positions held:

1961-62 Design Engineer/ Rocket Test Conductor, General Dynamics/Astronautics.
1963-65 Design Engineer, The Boeing Co./Aerospace.
1965-66 Teaching Asst., University of Washington.
1966-68 Research Assistant, University of Washington.
1968-73 Research Associate, University of Wisconsin.
1973-76 Assistant Scientist, University of Wisconsin.
1976-77 Visiting Associate Physicist, UC Irvine.
1977-79 Visiting Associate Professor, UC Irvine.
1980-83 Visiting Associate Professor, University of Hawaii.
1983-88 Associate Professor, University of Hawaii.
1988-Present Professor, University of Hawaii

See attached lists of publications, students, thesis committee membership, and public talks.

present projects as of 11/08:

- **Super-Kamiokande** Running experiment since 1996, discovery of muon neutrino oscillations, a wealth of material on many areas of neutrino studies. This project opened up the field of neutrino oscillations, has one associated Nobel Prize and is generally expected to have another. Will continue at least to 2016.
- **KamLAND** Discovered electron anti-neutrino oscillations from nuclear power reactors around Japan. Also began the emerging field of the study of the earth with neutrinos. Being upgraded to enable detection of solar *Be* neutrinos. Will operate for many years.
- **T2K** Future (2009) high precision neutrino study from new 50GeV proton machine ion Tokai shooting 300km to SuperK.
- **ANITA** Operational project for UHE neutrino detection from a balloon in Antarctica. Flew in 2007-8 and flying again in 2008-9.

- **ASHRA** Cosmic ray project on Mauna Kea, Big Island in Hawaii, to study UHE neutrinos via air fluorescence, and lower energies via Cherenkov radiation. Marginal involvement.
- **NESTOR** Small, mostly advisory, participation in Mediterranean based deep water neutrino detector, part of the large KM3 deep ocean project, a follow-on to the former DUMAND Project in Hawaii.
- **SALSA** Collaboration under formation for salt dome based UHE neutrino detector. Presently on hold pending outcome of ANITA experiment.
- **Hanohano** New project to detect anti-neutrinos from radioactive decays throughout the earth and search for a natural reactor at the Earth's core. Have conducted design studies and trying to move to major construction. Meanwhile carrying out computer and laboratory studies at UH.
- **NNSC** Working with collaborators across the US to establish a National Neutrino Sciences Center, location to be determined.
- **cosmology** Working (2008) with two collaborators (one at IfA, one at Perimeter Institute in Canada) on a new and fairly revolutionary cosmological model.

Awards:

- The Rossi Prize, co-recipient 1988
- The Asahi Prize, co-recipient 1998
- UH Regents Medal for Excellence in Research 1999
- ARCS Scientist of the Year Award 2007

more detail: see <http://www.phys.hawaii.edu/~jgl>