

RICHARD JEFFREY WILKES

Education: BSE(EE), U. of Michigan, 1967; MS (Physics), U. of Wisconsin/Madison, 1969; PhD (Physics), U. of Wisconsin/Madison, 1974, PhD advisor: D.D. Reeder.

Employment: Kenneth Young Memorial Prof. of Physics, U. Of Washington, 2001--, Research Professor, U. of Washington, 1991-2001, Res. Associate Professor, U. of Washington, 1988-91; Senior Res. Assoc., U. of Washington, 1984-88; Research Scientist, U. of Washington, 1980-84; Res. Assoc., U. of Washington, 1974-80;.

Experience: Surface, underground, and balloon borne cosmic ray experiments, including Echo Lake Experiment (1968--74); US-Japan e-Spectrum (1975--); JACEE (1979--); DUMAND (1990--94), Super-Kamiokande (1994--). Accelerator-based particle physics experiments, including Fermilab E382, E524, E525, E575, E564, E665, E666; BNL E814, E863, CERN EMU01, EMU12; KEK K2K (E362); and T2K at J-PARC.

Patents held: US Patent 5,469,403, "Digital sonar system" (with Kenneth Young).

Selected publications (highest impact):

1. "Evidence of electron neutrino appearance in a muon neutrino beam", K. Abe et al. (T2K Collaboration), Phys. Rev. D 88, 032002 (2013)
2. "Measurement of Neutrino Oscillation Parameters from Muon Neutrino Disappearance with an Off-axis Beam", K. Abe et al. (T2K Collaboration), submitted to Physical Review Letters, arXiv:1308.0465v1 [hep-ex]
3. "Evidence for oscillation of atmospheric neutrinos", The Super-Kamiokande Collaboration, Phys.Rev.Lett. 81 (1998) 1562-1567
4. "A Measurement of Atmospheric Neutrino Oscillation Parameters by Super-Kamiokande I", Super-Kamiokande Collaboration, Phys.Rev. D71 (2005) 112005.
5. "Search for Astrophysical Neutrino Point Sources at Super-Kamiokande", Super-Kamiokande Collaboration, Astrophys. J. 704 (2009) 503-512, arXiv:0907.1594
6. "Search for Neutrinos from GRB 080319B at Super-Kamiokande", Super-Kamiokande Collaboration, Astrophys. J. 697, 730-734 (2009), arXiv:0903.0624
7. "Measurement of Neutrino Oscillation by the K2K Experiment", K2K collaboration: M. H. Ahn, et al, hep-ex/0606032, Phys. Rev. D 74, 072003 (2006).
8. "Cosmic Ray Proton and Helium Spectra --Results from the JACEE Experiment", K.~Asakimori et al, Astrophysical Journal, 502:278, 1998.
9. "Extremely High Multiplicities in High-Energy Nucleus-Nucleus Collisions", T.H. Burnett, et al, Physical Review Letters, 50, 2062 (1983).
10. "WALTA school-network cosmic ray detectors", R. J. Wilkes, H.-G. Berns, T. H. Burnett, R. Gran, IEEE Trans. On Nucl. Sci. 51, 1385 (2004).

Synergistic Activities:

1. Faculty coordinator for UW Physics Professional MS degree program.
2. Outreach activities (lectures, demonstrations) for primary and secondary schools: Co-founder (with T. Burnett) of WALTA (QuarkNet supported school outreach program).
3. Member of public website committee in T2K Collaboration.

4. Review panel chair for NASA, review panel member for NSF, DOE, NRC(Canada); referee for major international physics journals; book reviewer for Oxford Press.
5. Member, Puget Sound/BC chapter of Marine Technology Society.

Graduate and Postdoctoral Advisees:

Michael Dziomba, PhD 2012; currently employed in software industry in Japan.

Eric Thrane, PhD 2008, currently at LIGO Laboratory, CalTech.

Rik Gran, Postdoc, currently faculty at U. Minn./Duluth

Stephen Boyd, Postdoc, currently faculty at U. Warwick (UK)

Kiyoshi Keola Shiraishi, PhD 2006, currently at Microsoft Corp.

Kristine Washburn, PhD 2003, currently at Everett Community College.

Eric Zager, PhD 2002, currently at Microsoft Corp.

Andrew Stachyra, PhD 2002, currently at MIT Lincoln Laboratory.

Erik D. Olson, PhD 1999, current position unknown.

Jeffrey S. George, PhD 1998, currently at Aerospace Corp.