

Earl A. Peterson

Curriculum Vitae

Address: School of Physics and Astronomy
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Birthdate: January 8, 1940, Puyallup, Washington

Education: B.S. - 1962, University of Washington
M.S. - 1967, Stanford University
Ph. D. 1967, Stanford University

Positions: Research Associate, University of Minnesota, 1967-1973
Assistant Professor, University of Minnesota, 1973-1978
Associate Professor, University of Minnesota, 1978-1983
Professor, University of Minnesota, 1983-present

Co-Principal Investigator (USDOE contract) 1988-present
Co-spokesman for the Soudan 2 experiment 1996-present
Soudan site coordinator, MINOS experiment 1996-present
MINOS technical board, 1996-present.

Research Interests:

My research interests are centered on the capabilities of the Soudan 2 detector, proposed and constructed during the period from 1982 through 1993 to study possible rare decay modes of the nucleon, and its successor experiment, MINOS. The Soudan 2 detector has also been able to contribute to the emerging fields of underground muon astronomy, neutrino astronomy and the study of atmospheric neutrino interactions. Anomalies in the latter seem to indicate the possibility of neutrino oscillations and thus both neutrino mass and neutrino flavor coupling. The MINOS experiment is designed to confirm these indications by generating a beam of muon-type neutrinos at Fermilab and detecting them in both the existing Soudan 2 detector and a new 6kt detector under construction at Soudan.

Honors: Phi Beta Kappa
Magna Cum Laude

Societies: American Physical Society

Invited talks:

Colloquium, Syracuse University, October, 1985.
Colloquium, University of Washington, February, 1986.
Seminar, University of Washington, February, 1986.
Seminar, University of Illinois, October, 1987.
Seminar, SLAC, February, 1988.
Colloquium, Pennsylvania State University, April, 1989.
Seminar, University of Chicago, April, 1989.
Talk, Gustavus Adolphus, October, 1989.
Talk, Div. of Particles/Fields, Vancouver, August, 1991.
Colloquium, University of Minnesota, January, 1992.
Seminar, University of Oxford, December, 1992.
Talk, FNAL Workshop on neutrinos, April, 1993.
Colloquium, University of Arizona, March, 1994.
Colloquium, University of Chicago, February, 1995.
Invited talk: Neutrino '97 (Helsinki), June, 1996.
Invited talk: Centennial Men's Club (St. Paul) 4/97.
Colloquium (partial), University of Minnesota, April, 1997.
Seminar, High Energy, University of Minnesota, November 1997.
Seminar, Nuclear, University of Minnesota, November 1997.
Colloquium, Northern Illinois University, April 1998.
Invited talk: Neutrino '98, Takayama, June 1998.
Invited talk: Neutrino 2000, Osaka, June 2000.