

Tom H. Jordan: MIT

BIRTH: October 8, 1948, Coco Solo, Canal Zone
S.S. NUMBER: 264-92-7023
CITIZENSHIP: U.S.A.

EDUCATION: B.S., Geophysics, California Institute of Technology, 1969
M.S., Geophysics, California Institute of Technology, 1970
Ph.D., Geophysics and Applied Mathematics, California Institute of Technology, 1972

EMPLOYMENT: 1969-1972: Graduate Research Assistant, California Institute of Technology, Pasadena, CA; 1972-1975: Assistant Professor, Princeton University, Princeton, NJ; 1975-1977: Assistant Professor, Scripps Institution of Oceanography, University of California, San Diego, CA; 1977-1982: Associate Professor, SIO; 1982-1984: Professor, SIO; 1984-Present: Robert R. Shrock Professor of Earth and Planetary Sciences, Massachusetts Institute of Technology, Cambridge, MA; 1988-1998: Department Head, Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology, Cambridge, MA

HONORS & AWARDS: National Merit Scholar, 1965-1969; Alfred P. Sloan Fellow in Physics, 1980-1982; Fellow, American Geophysical Union, 1983; James B. Macelwane Award, American Geophysical Union, 1983; Fellow, American Academy of Arts and Sciences, 1996; Member, National Academy of Sciences, 1998; George P. Woollard Award, Geological Society of America, 1998.

Scientific Publications

Approximately 120, on various topics in seismology, geodynamics, tectonics, geodesy, and marine geology. Five examples relevant to the proposed work are:

96. 1991 Jordan, T.H., Far-field detection of slow precursors to fast seismic ruptures, *Geophys. Res. Lett.*, **18**, 2019-2022.
99. 1993 Ihmlé, P. F., P. Harabaglia, and T. H. Jordan, Teleseismic detection of a slow precursor to the great 1989 Macquarie Ridge earthquake, *Science*, **261**, 177-183.
109. 1995 Ihmlé, P. F., and T. H. Jordan, Source time function of the great 1994 Bolivia deep earthquake by waveform and spectral inversion, *Geophys. Res. Lett.*, **22**, 2253-2256.
113. 1996 McGuire, J. J., P. F. Ihmlé, and T. H. Jordan, Time-domain observations of a slow precursor to the 1994 Romanche Transform earthquake, *Science*, **274**, 82-85, 1996.
127. 1999 McGuire, J. J., and T. H. Jordan, Further evidence for the compound nature of slow earthquakes: the Prince Edward Island earthquake of April 28, 1997, *J. Geophys. Res.*, in press.

Recent Collaborators (last 48 months, exclusive of students)

D. Weidner, SUNY, Stony Brook; Y. Wang, University of Chicago; Paul Silver, Carnegie Institution of Washington; David James, Carnegie Institution of Washington.

Doctoral Dissertations Supervised

- 1979 S. A. Sipkin, *Constraints on Earth Structure Determined from Observations of Multiple ScS*, UCSD.
- 1981 K. A. Sverdrup, *Seismotectonic Studies in the Pacific Ocean Basin*, UCSD.
- 1982 A. L. Lerner-Lam, *Linearized Estimation of Higher-Mode Surface Wave Dispersion*, UCSD.
P. G. Silver, *Optimal Estimation of Scalar Seismic Moment*, UCSD.

- 1984 K. C. Creager, *Geometry, Velocity Structure, and Penetration Depths of Descending Slabs in the Western Pacific*, UCSD.
- 1985 M. A. Riedesel, *Seismic Moment Tensor Recovery at Low Frequencies*, UCSD.
D. K. Smith, *The Statistics of Seamount Populations in the Pacific Ocean*, UCSD.
R. G. Adair, *Microseisms in the Deep Ocean: Observations and Theory*, UCSD.
- 1988 K. M. Fischer, *The Morphology and Dynamics of Subducting Lithosphere*, MIT.
- 1989 J. Sauber, *Geodetic Measurement of Deformation in California*, MIT.
J. S. Revenaugh, *The Nature of Mantle Layering from First-Order Reverberations*, MIT.
G. C. Beroza, *Near-Source Imaging of Seismic Rupture*, MIT.
- 1990 L. S. Gee, *New Techniques for Seismological Studies of Earth Structure*, MIT.
E. Lavelly, *Theoretical Investigations in Helioseismology*, MIT.
J. A. Goff, *Stochastic Modeling of Seafloor Morphology*, MIT.
- 1991 M. H. Murray, *Global Positioning System Measurement of Crustal Deformation in Central California*, MIT.
- 1991 K. L. Feigl, *Geodetic Measurement of Tectonic Deformation in Central California*, MIT.
- 1994 P. F. Ihmlé, *Teleseismic Study of Earthquakes of Long Duration*, MIT.
- 1995 P. Puster, *The Characterization of Seismic Earth Structures and Numerical Mantle Convection Experiments Using Two-Point Correlation Functions*, MIT.
- 1995 J. G. Gaherty, *Structure and Anisotropy of the Upper Mantle*, MIT.
- 1997 H. F. Webb, *A Qualitative and Quantitative Study of the Distribution of Pelagic Sediment in the Atlantic Basin*, MIT.
- 1998 R. Katzman, *Structure and Dynamics of the Pacific Mantle*, MIT.

e. Graduate and Postgraduate Advisors:

Ph.D. advisor: D. L. Anderson, Caltech
Postgraduate advisor: none