

David J. Ernst
Professor of Physics
Chair, Department of Physics and Astronomy
Director, Communication of Science and Technology Program
Vanderbilt University

Professional Preparation

Massachusetts Institute of Technology	Physics	BS, 1965
Massachusetts Institute of Technology	Physics	PhD, 1970
Case Western Reserve University	Postdoctoral Fellow	1972-1975

Appointments

- Assistant Professor/ Professor Centro de Investigacion y de Estudios Avanzados, Mexico, 1970-1972
- Research Associate/Instructor Case Western Reserve University, 1972-1975
- Assistant Professor Texas A&M University, 1975-1980
- Visiting Assistant Professor University of Washington, 1979-1980
- Associate Professor Texas A&M University, 1980-1985
- Professor Texas A&M University, 1985-1992
- Visiting Scientist Jefferson Laboratory, 2001-2002
- Professor Vanderbilt University, 1992-present

Grants

- 1975-1992 Work supported by National Science Foundation
1992-present Work supported by Department of Energy (present \$388,000, 2000-2003)

Publications

1. D. C. Latimer and D. J. Ernst, "Three-neutrino model analysis of the world's oscillation data," submitted to *Phys. Rev. Lett.*
2. D. J. Ernst, "Meson Cloud Contributions to the Nucleon and Delta Masses," *Phys. Rev. C* 64, 035201 (2001).
3. D. E. Malov, A. S. Umar, D. J. Ernst, D. J. Dean, "Relativistic Heavy-Ion Collisions in the Dynamical String Parton Model," *Phys. Rev. C* 63, 024902 (2001).
4. D. J. Ernst, "Proper Self-Energy in the Presence of Anomalous Thresholds," in *Condensed Matter Theories, Vol. 14*, ed. D. J. Ernst, A. S. Umar, and I. Perakis (Nova Scientific, Huntington, New York, 2000) p. 283
5. D. J. Ernst, "Weinberg Approach to High-Spin Fields," in *Lorenz Group, CPT, and Neutrinos*, ed. A. E. Chubykalko, V. V. Dvoeglazov, D. J. Ernst, V. G. Kadyshevsky, and Y. S. Kim (World Scientific, NY, 2000) p. 47

Synergistic Activities

Vanderbilt University

Chair, Department of Physics and Astronomy, 1992-1995, 1997-1999, 2002-present
Associate Dean, College of Arts and Science, 1995-1997
Assistant to the Dean, College of Arts and Science, 1997
Interim Director, W. M. Keck Foundation Free Electron Laser Center, 1999-2000
Director, Communication of Science and Technology Program, 2003-present

National Society of Hispanic Physicists

Administrative Executive Officer, 1996-present

Southeastern Universities Research Association (SURA)

Board of Trustees, Member, 1993-present; Executive Committee, 1999-present;
Vice Chair, 1999; Chair, 2000-2001; Past Chair, 2002-2003
Nominating Committee, Chair, 2003
Working Group on Photon Science in the Southeast, Chair, 1999-2001

Universities Research Association (URA)

Council of Presidents, Vanderbilt Representative, 1996-2003

American Physical Society

Forum on International Physics, Vice Chair, 1998; Chair Elect, 1999; Chair, 2000;
Past Chair, 2001
Committee on International Scientific Affairs, Member, 1999-2002, Chair 2000
Southeast Section, Member, Executive Committee, 2000-present
Bouchet Award Committee, 2000-2001
Wheatley Award Committee, Member, 2002-2004; Chair, 2004
Task Force on US-African Relations, Chair, 2003-present

National Science Foundation

Physics Division, Nuclear Theory Review Panel, 2000
Integrated Graduate Education and Research Training, Review Panel, 1998-1999
Scientists with Disabilities, Review Panel, 1997

International Union of Pure and Applied Physics

US Liaison Committee, Member, 2003-present

Collaborators and Other Affiliations

Collaborators: M. B. Johnson, Los Alamos; C. M. Chen, Taiwan; D. J. Dean, Oak Ridge
Advisors: Graduate, F. M. H. Villars (deceased); Postdoc, R. M. Thaler
Present Advisees: Postdoc, D. Latimer; graduate student, Jesus Escamilla;
undergraduate, Gwendolyn Hubble, Tuta Guerra, Jessica Lavigne