

PROFESSIONAL DATA ON JAMES W. DUFTY

Born May 5, 1940, Freeport, New York

Education

BS. (Physics) Williams College 1962
Ph.D., MS. (Physics) Lehigh University 1967, 64

Professional Record

Graduate Teaching and Research Assistant, Lehigh University, 1962-67
Armstrong-Cork Research Fellow, 1966-67
Postdoctoral Research Associate, Lehigh University, 1967-68
Postdoctoral Fellow, University of Florida, 1968-70
Assistant Professor of Physics and Chem. Eng., University of Florida, 1970-71
Assistant Professor of Physics, University of Florida, 1971-74
Associate Professor of Physics, University of Florida, 1974-78
Professor of Physics, University of Florida, 1978-Present
Visiting Associate Professor of Physics, Inst. Fluid Dynamics, Univ. of Maryland, 1976-77.
Visiting Scientist, Joint Institute for Laboratory Astrophysics, Univ. of Colorado, 1979-80.
Visiting Physicist, National Bureau of Standards, Washington, D.C., 1982-83
Visiting Professor, Inst. Theor. Physics, Univ. of Utrecht, Netherlands, Fall 1988, Fall 1993.
Visiting Scientist, Massachusetts Institute of Technology, Boston, Winter and Spring 1990.
Visiting Professor, University of Provence, France, Summers 1992, 1994-2005.
Associate Dean for Research, University of Florida, 1994-99.
O'Neil Professor of Physics, 2001 -
Visiting Professor, University of Sevilla, Spain, Fall 2003.
American Institute of Physics Fellow, US State Department, 2006 – 07.

Awards

Sigma Pi Sigma Teacher of the Year Award, 1974
Faculty Development Awards: 1974, 1976, 1979, 1980, 1982, 1989, 1991, 1996, 2003.
TIP Teaching Award, 1996; Productivity Award, 1999; STEP award 2000;
CLAS Term Professorship, 2001.
The President's Medallion, University of Florida, 2005.

Other Professional Activity

- Visiting Assistant Professor, Montana State University, Summers, 1969, 1970 (NSF Workshop on recent developments in statistical mechanics).
- Workshop on Equilibrium and Non equilibrium Statistical Mechanics, (Center for Statistical Mechanics, University of Texas, Spring, 1970).
- Second International Conference on Spectral Line Broadening, Eugene, Oregon, 1974 (Invited Speaker).
- Summer Visitor, Lawrence Livermore Laboratory, University of California, 1974
- Symposium on Quantum Statistics and the Many-Body Problem, Sanibel, 1975, (co-organizer).
- CECAM/CEA Conference on High Temperature and Pressure Effects in U.V. Spectra, Paris, October, 1975 Invited Speaker).
- Workshop on Plasma Spectra, Universite de Paris, Orsay, France, Fall, 1976. (Invited Speaker).
- International Symposium on Quantum Fluids and Solids, Sanibel, 1976, (co-organizer).
- Second International Symposium on Quantum Fluids and Solids, Sanibel, 1976 (Member of the Organizing Committee).
- Symposium on Fundamental Problems of Quantum Field Theory, Flagler Beach, 1979, (Member of Organizing Committee).
- Workshop on Spectral Line Broadening, National Bureau of Standards, Washington, D.C., 1979 (Invited speaker).
- Fifth International Conference on Spectral Line Shapes, Berlin, West Germany, July, 1980 (Invited speaker).
- International Workshop on Statistical Mechanics of Ionic Matter, Les Houches, France, March, 1982 (Invited speaker).
- International Symposium on Quantum Chemistry and Condensed Matter in Honor of Joseph Mayer, Palm Coast, Florida, March, 1982 (Symposium Leader).
- International Conference on Nonlinear Fluid Behavior, National Bureau of Standards, August, 1982 (Invited speaker).
- CECAM International Workshop on Radiative Properties of Hot Dense Matter, Paris, May, 1984 (Invited speaker).
- Member, Organizing Committee for International Conferences on Spectral Line Shapes (1984-92).
- XIV Mexican Meeting on Statistical Physics, Oaxtepec, Mexico, January, 1985 (Invited Speaker).
- International Enrico Fermi School of Physics on Molecular Dynamics Simulation, Varenna, Italy, July, 1985 (Invited speaker).
- International Conference on Recent Developments in Nonequilibrium Thermodynamics, Barcelona, Spain, September, 1985 (Invited Speaker).

CECAM Workshop on Nonequilibrium Computer Simulation, Paris, August, 1985 (Invited Participant).

US - China Scientific Exchange, Peoples Republic, May, 1986 (Invited delegation member).

Strongly Coupled Plasma Physics Meeting, University of California, Santa Cruz, California, August, 1986 (Invited Speaker).

Workshop on Spectral Line Formation in Plasmas under Extreme or Unusual Conditions, Nice France, September, 1987 (Invited Speaker).

International Symposium on Opacity, CECAM, Orsay, France, July, 1988 (Invited Participant).

Gordon Conference on Structural Glasses, New Hampshire, August, 1988 (Invited Speaker).

Yamada Conference XXIV - Strongly Coupled Plasma Physics, Tokyo, August 1989 (Invited speaker).

NATO Advanced Workshop on Microscopic Simulations of Complex Flows, Brussels, August, 1989 (Invited speaker).

Oaxtepec Conference on Statistical Mechanics, Mexico City, January, 1990 (Invited speaker).

American Institute of Chemical Engineering 1990 Spring National Meeting, Orlando, March, 1990 (Invited Speaker).

VI International Workshop on Physics of Nonideal Plasmas, Berlin, November, 1991 (Invited speaker).

Professore Contrato, University of Pavia, Pavia, Italy, June, 1992 (10 invited lectures).

International Workshop on Condensed Matter Physics, International Center for Theoretical Physics, Trieste, Italy, June 1992 (Invited speaker).

Visiting Professor, University of Provence, Marseille, France, July-August 1992; May-June 1994, June 1995, May 1996.

International Workshop on Physics of Nonideal Plasmas, Rostock, November, 1993 (Invited speaker).

Visiting Professor, University of Utrecht, The Netherlands, Fall 1993

Editorial Board, Journal of Statistical Physics (1991-94).

13th Sitges Conference on Non-equilibrium Statistical Mechanics, Barcelona, June 1994 (Invited speaker).

VII International Conference on Strongly Coupled Plasmas, Binz, Germany, September, 1995 (Invited speaker).

CECAM Conference on Simulation of Complex Fluids, Lyon, France, July, 1996 (Invited speaker).

International Organizing Committee, Conferences on Strongly Coupled Coulomb Systems, 1996 - present.

Conference on Strongly Coupled Coulomb Systems, Boston, August 1997 (Invited Speaker)

NATO Workshop on Dynamical Systems, Leiden, July 1998 (Invited Speaker).

9th International Workshop on Nonideal Plasmas, Rostock, Germany, September 1998 (Program Committee member, Invited Speaker).

US Latin American Workshop on Molecular and Material Sciences, Cuernavaca, Mexico, February 1999 (Invited speaker)

Fourth International Liquid Matter Conference, Granada, Spain July 1999 (Plenary speaker)

Invited short course on granular media, University of Barcelona, July 1999.

Workshop on Modeling Suspensions, NIST, Gaithersburg, August 1999 (invited speaker).

International Conference on Strongly Coupled Systems, Saint-Malo, France September 1999 (Organizing Committee).

XXIX Winter Meeting on Statistical Physics, Cuernavaca, Mexico, January 2000 (invited speaker).

Program Advisory Committee, Lawrence Livermore Laboratories, January 2000 - present

DOE Computational Materials Science Network Workshop, February 2000 (participant).

Visiting Professor, University of Extremadura, Badajoz, Spain, March 2000

International Conference "Changes in Time", Utrecht, The Netherlands, June 2000 (invited speaker).

International Workshop on Non-ideal Plasmas, Greifswald, Germany, September 2000 (invited speaker).

Workshop on "Computational Kinetic Theory: Mesoscale Applications", CECAM, Lyon, France, May 2001 (invited speaker).

Workshop on "Challenges in Granular Physics", ICTP Trieste, Italy, August 2001 (invited speaker).

DOE Workshop on Stockpile Stewardship grants program, Livermore, CA, October 2001 (invited speaker).

Physics of Non-ideal Plasmas Conference Series, program committee member 2000 – present.

International Symposium in Honor of J. R. Dorfman, Maryland, May 2002 (invited speaker).

Workshop on "Granular Gases", CECAM, Lyon, France, September 2002. (invited speaker).

International Conference on Strongly Coupled Coulomb Systems, Santa Fe, NM, September 2002 (invited speaker).

2nd DOE Workshop on Granular Flow and Kinetics, Argonne National Laboratory, Chicago, January 2003 (invited speaker).

Physics of Non-ideal Plasmas 12, Valencia, Spain, March 2003 (Organizing Committee).

International Workshop on Off-shell Effects in Quantum Transport, Max Planck Institute for Physics of Complex Systems, Dresden, Germany, May 2003.

American Mathematical Society, Univ. North Carolina, October 2003 (invited speaker).

American Physical Society, March meeting 2004, topical session (invited speaker).

Gordon Conference on Granular Fluid Flow, Colby College, ME, June 2004 (invited Discussion Leader).

24th International Symposium on Rarefied Gas Dynamics, Bari, Italy, July 2004 (invited speaker).

Workshop on Modeling and Numerics of Dissipative Systems, Lipari, Italy, May 2004 (invited speaker).

Workshop on Kinetic Theory of Nonideal Plasmas in honor of Y. Klimontovich, Keil, Germany, September 2004 (invited speaker).

International Workshop on Brownian Motion – One Hundred Years after Einstein, Leiden, The Netherlands, March 2005 (invited speaker).

Kalvi Institute for Theoretical Physics Workshop on Granular Physics, UC Santa Barbara, May-June 2005 (invited participant).

Gordon Conference on Granular Fluids, Oxford, England, June 2006 (invited speaker).

American Physical Society, March meeting 2007, topical session (invited speaker).

2nd Warsaw School on Statistical Physics, Kazimierz, Poland, June 2007 (6 invited lectures).

Granular Fluids Conference, Sevilla, Spain, September 2007, invited speaker.

Brandt-Ritchie Conference, Playa del Carmen, Mexico, December 2007, invited speaker

Committee of Visitors, International Division, National Science Foundation, March 2008, invited member

International Conference on Spectral Line Shapes, Valladolid, Spain, June 2008, invited speaker.

Gordon Conference on Granular Flows, Colby, Maine, June 2008, invited session chair.

Strongly Coupled Coulomb Systems, Camerino, Italy, July 2008, Program Committee Chair.

Books edited

Quantum Statistics and the Many-Body Problem, eds. S.B. Trickey, W. Kirk, and J.W. Dufty (1975, Plenum Press, N.Y.).

Quantum Fluids and Solids, eds. S.B. Trickey, E.D. Adams, and J.W. Dufty (1977, Plenum Press, N.Y.).

Special Issue of *Journal of Statistical Physics*, eds. J. W. Dufty, J. R. Dorfman, and R. Brito (1997).

Long Range Correlations in Astrophysical and Other Systems, eds. J. R. Buchler, J. W. Dufty, and H. Kandrup (1997, Annals NY Academy of Sciences, NY).

Strongly Coupled Coulomb Systems, eds. J. Benage, J. W. Dufty, and M. Morillo (special issue, J. Phys. A **36**, 2003).

Publications

(see elsewhere for detailed list of 215 publications in multiple journals)

Research Grants

American Gas Association (\$20,000; 1973-1974)

American Gas Association (\$40,000; 1974-1976)

National Science Foundation (\$75,400; 1974-1976)

Division of Sponsored Research - Summer Faculty Appointment (\$3,500, 1974).

Division of Sponsored Research (\$8,000; 1975)

Southern Regional Education Board (Travel Grant; \$930; 1975)

Southern Regional Education Board (Travel Grant; \$1,080; 1976)

National Science Foundation (PHY 76-21453; \$148,900; 1976-1978)

National Science Foundation (DMR-76-21893; \$4,350; 1976-1977)

Faculty Development Grant, Univ. of Florida (\$9,000; 1976-1977)

Air Force Office of Scientific Research (DMR-76-21893; \$4,350; 1976-1977)

National Science Foundation (CHE 78-22211; \$55,900; 1978-1979)

National Science Foundation (PHY 78-23650; \$3,500; 1979-1980)

Graduate School Travel Grant - DSR (\$370; 1979)

Division of Sponsored Research - Seed Grant (\$2,500; 1979)

Graduate School Travel Grant - DSR (\$400; 1980)

National Science Foundation (Travel Grant; \$1,000; 1980)

National Science Foundation (CHE 79-20385; \$80,000; 1980-1982)

Petroleum Research Fund (\$30,000; 1980-1982)

Graduate Research Assistantship Grant - DSR (\$6,000; 1980)

Faculty Research Award - DSR (\$12,000; 1980)

National Science Foundation (\$40,000; 1982-1983)

National Bureau of Standards - DOE (\$37,000; 1982-1983)

Graduate School Travel Grant - DSR (\$420; 1984)

Alianza Espana - Florida (\$17,000; 1984-85)

National Science Foundation (\$160,000; 1985-88)

U.S. - Spain Joint Committee for Scientific Cooperation (\$60,000; 1985-88)

National Science Foundation (\$8,000; 1988-91)

Division of Sponsored Research (\$13,000; 1988-89)

Graduate Research Assistant Grant-DSR (\$14,000; 1988-89)

Graduate School Travel Grant-DSR (\$400; 1988)

Petroleum Research Fund (\$40,000, 1989-91)

National Science Foundation (\$50,000, 1989-91)

National Science Foundation (sabbatical supplement, \$5,000; 1990)

NATO (\$6,000, 1990-91)

Division of Sponsored Research (\$ 17,000; 1991)

Division of Sponsored Research (\$ 14,000; 1993)

University of Provence (Summer Visiting Professor \$ 35,000, 1993-99)

National Science Foundation (\$ 190,000; 1993-96).

National Science Foundation (International Division, U.S. - Korea, \$ 4500, 1994)

National Science Foundation (International Division, U.S. - Korea, \$ 35,000; 1996-99)

National Science Foundation (International Division, U.S. - India, \$ 22,000; 1996-99)

Division of Sponsored Research (\$ 4,500; 1995)

Division of Sponsored Research (\$ 15,000; 1996).

NATO (US-Moscow; \$ 35,000, 1996-98).

National Science Foundation - workshop, Buchler and Kandrup co-PIs (Theoretical Physics / Astrophysics, \$ 3,000; 1997-2000).

National Science Foundation (Theoretical Physics, \$ 190,000; 1997-2001).

Department of Energy (\$167,000; 1998-2001).

NSF KDI (with 6 other PI s, Materials/Chem., \$ 2.2 M, 1999-03.

NATO (US-Moscow; \$ 35,000, 2000-03).

National Science Foundation / Department of Energy (\$ 150,000; 2002-2005).

Department of Energy (\$ 136,000; 2002-2004).

Department of Energy (\$10,000; 2002-2003).

NSF ITR medium (with 6 others), \$ 2.5 M, 2003-07.

NSF-DOE, \$ 210,000, 2007-09.