

Robert W. Dunford

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Professional Experience

- **1998-Present.** Argonne National Laboratory - CHM, CSE Physicist.
- **1986-1998.** Argonne National Laboratory - Physics Division Physicist.
- **1996.** Visiting Scientist, GSI, Darmstadt, Germany,
- National Science Foundation Rotator: AMO Program Director.
- **1978-1980.** Princeton University, Department of Physics Instructor.
- **1980-1986.** Princeton University, Department of Physics Assistant Professor.
- **1974-78.** University of Michigan, Research/Teaching Assistant.

Education

- B.S.E. Science Engineering, University of Michigan, 1969.
- M.S. Physics, University of Michigan, 1974.
- Ph.D. Physics, University of Michigan, 1978.

Awards

- Horace H. Rackham Predoctoral Fellow, University of Michigan (1977)
- Exceptional Performance Award, Argonne National Laboratory (1991)

Career Activities & Highlights

- Research in Atomic Physics, Precision Measurements, Forbidden Decays, Tests of Relativistic Quantum Mechanics and QED, Fundamental Symmetries, Parity Nonconservation, Atom-Ion Collisions, Interface Between Atomic and Nuclear Physics, X-ray and Inner-shell Spectroscopy, Strong-Field-Laser Control of X-ray Absorption, Laser-Aligned Molecules, Interatomic Coulombic Decay, and Optical Production of Metastable Kr for Atom Trapping.
- Argonne National Laboratory
 - Leader of Research Program in Atomic Physics at the ATLAS Accelerator, 1986-2001
 - Atomic Physics Seminar Chairman, 1987-88, 1990, 1992-93
 - Member of the APEX Collaboration (ATLAS Positron Experiment), 1988-1996
 - Acting Chief, Atomic Physics Program, 1990-91
 - Physics Colloquium Committee, 1986-87, 1990-91(Chair), 1995-96

- Physical Research Pacesetter Committee, 1992-93
- Chairman Physics Division Cryogenics Safety Committee, 1992-1997
- Physics Division Safety Coordinating Committee, 1993-1997
- Principal Investigator NATO Collaborative Research Grant, 1997-2000
- Principal Investigator ANL LDRD Research Grant, 2000-2002
- Princeton University
 - Taught Elementary Physics and Sophomore Laboratory, 1978-86
 - Primary Advisor to two Ph. D. Students, seven Senior-Thesis Students, and seven Juniors in their independent work, 1980-1986
 - Preliminary and General Exam Committee, 1980-81
 - Seminar Chairman: 1981-1982 and 1984-1985
 - Principal Investigator: Research Corporation Grant, 1982-86
 - NSF Grant, 1983-86
 - NBS Precision Measurements Grant, 1983-86
 - Faculty Advisor - Wilson College, 1983-86
 - Chairman of Physics Department Junior Committee, 1985-86
- Professional Organizations
 - American Physical Society (Fellow) Division of Atomic, Molecular, and Optical Physics
 - Executive Committee of TG Prec. Meas., 1995-98
 - American Association for the Advancement of Science
 - American Association of Physics Teachers

Conferences

- Workshop on Polarized ^3He Beams and Targets, Princeton, NJ, 1984 (Co-Organizer)
- Workshop on Opportunities for Atomic Physics using Slow, Highly-Charged Ions, Argonne Illinois, 1987 (Member of Organizing Committee)
- International Conference on Atomic Spectroscopy and Highly Ionized Atoms, Lisle, Illinois, 1987 (Member of Organizing Committee)
- Workshop on Future Experiments at ATLAS to Study Positron Production in Heavy Ion Collisions, 1987 (Member of Organizing Committee)
- Department of Energy Panel for Future Opportunities in Atomic and Molecular Science, 1989 (Member)
- Annual Meeting of the Division of Atomic, Molecular and Optical Physics of the American Physical Society, Chicago, IL, 1992 (Member of Local Committee)
- April Meeting of the American Physical Society, 1992, Organized Symposium: "Precision Measurements and Fundamental Constants"
- Annual Meeting of the Division of Atomic, Molecular and Optical Physics of the American Physical Society, 1993, Organized Symposium: "Fundamental Symmetries and Precision Measurements"

- April Meeting of the American Physical Society, 1995, Co-Organizer of Young Scientist Travel Support Program for the Precision Measurements and Fundamental Constants Topical Group
- International Conference on X-ray and Inner-Shell Processes, Chicago, Illinois, 1999 (Member of Organizing Committee)