

# CURRICULUM VITAE

**Malcolm M. Sanders, Ph. D.**

**Work:**

Department of Physics & Astronomy  
A-512 Cook Science Building  
University of Vermont  
Burlington VT 05405-0125  
(802)656-0050  
malcolm.sanders@uvm.edu

**Home:**

13 Pinkham's Flats  
Lamoine ME 04605  
(207)667-0040  
- or, during academic year -  
66 Park ST  
Burlington VT 05401  
(802)859-0417

**Education:**

1991	Ph. D. Applied Physics, Yale University.
1987	M. Phil. Applied Physics, Yale University.
1984	M. S. Applied Physics, Yale University.
1983	B. S. Engineering Physics (with highest distinction)  University of Maine.

**Employment:**

2004-	Senior Lecturer in Physics University of Vermont Burlington, Vermont
1996-2003	Lecturer in Physics University of Vermont Burlington, Vermont
1995-96	Lecturer in Physics Bates College Lewiston, Maine
1995	Assistant Professor of Physics (temporary) University of Maine Orono, Maine
1994	Assistant Professor of Physics University of Maine at Farmington Farmington, Maine
1993	Research Associate Department of Agricultural Resource Economics University of Maine Orono, Maine (development of Multispecies Fisheries Model)
1992-93	Assistant Professor of Physics (temporary) University of Maine Orono, Maine

- 1992      Visiting Research Associate  
Institute for Theoretical Atomic and Molecular Physics  
Harvard University  
Cambridge, Massachusetts
- 1987      Research Associate  
T-12 (Atomic and Molecular Physics) and  
Center for Nonlinear Studies  
Los Alamos National Laboratory  
Los Alamos, New Mexico
- 1983-91   Graduate Student and Teaching Assistant  
Yale University  
New Haven, Connecticut
- 1984      Research Assistant (Physical Oceanography)  
Bigelow Laboratory for Ocean Sciences  
Boothbay Harbor, Maine

**References:**                      Available on request

### **Publications:**

#### Papers:

- 1.) M.M. Sanders, R.V. Jensen, P.M. Koch, and K.A.H. van Leeuwen, "Chaotic Ionization of Highly Excited Hydrogen Atoms", Nuclear Physics B, Proceedings Supplement 2, 578 (1987).
- 2.) R.V. Jensen, S.M. Susskind, and M.M. Sanders, "Microwave Ionization of Highly Excited Hydrogen Atoms: A Test of the Correspondence Principle", Physical Review Letters 62, 1476, (1989).
- 3.) R.V. Jensen, M.M. Sanders, M. Saraceno and B. Sundaram, "Inhibition of Quantum Transport due to 'Scars' of Periodic Orbits", Physical Review Letters 63, 2771, (1989).
- 4.) R.V. Jensen, S.M. Susskind, and M.M. Sanders, "Chaotic Ionization of Highly Excited Hydrogen Atoms: Comparison of Classical and Quantum Theory with Experiment", Physics Reports 201 #1 March, 1991.
- 5.) M. M. Sanders and R.V. Jensen, "Classical Theory of Chaotic Ionization of Highly-excited Hydrogen atoms.", American Journal of Physics, vol. 64, number 1, January, 1996.
- 6.) M. M. Sanders and R.V. Jensen, "Classical Theory of Chaotic Ionization of Rydberg Helium Atoms", American Journal of Physics, vol. 64, number 8, August, 1996.

#### Books:

- 1.) M.M. Sanders, "Energy from the Oceans." in *The Energy Sourcebook: A guide to Technology, Resources, and Policy*, Ruth Howes and Anthony Fainberg, editors, AIP, 1991.

#### Thesis:

- 1) Malcolm M. Sanders, *Chaotic Ionization of One and Two Electron Atoms*. unpublished, 1991.

### **Professional Activities:**

Member: American Physical Society

Attended Chautauqua Short Course: Promoting Active Learning in Introductory Physics Courses II, Dickinson College, Carlisle, PA, June 2000

NSF-CCLI (Physics Section) Panelist for grant reviews, Washington DC, July 2003

Visiting Scholar - Dublin City University, Dublin, Ireland. Sabbatical Year 2005-06