

David A. Boboltz

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Birthdate: November 24, 1963, Washington, D.C.

Education

Ph.D., Physics, Virginia Tech, June 1997
M.S., Physics, Virginia Tech, December 1994
M.S., Applied Physics, The Johns Hopkins University, May 1990
B.S., Mechanical Engineering, Virginia Tech, June 1986

Experience

May 1995–present — Junior Research Associate, National Radio Astronomy Observatory, Socorro, New Mexico

Completing dissertation research with Dr. Philip Diamond. Thesis title: The Structure and Polarization Properties of the SiO Masers in the Extended Atmosphere of R Aquarii.

August 1992–May 1995 — Research Assistant, Department of Physics, Virginia Tech, Blacksburg, Virginia

Carried out research with Dr. John Simonetti. Reduced single VLBA antenna observations of water and OH masers. Modeled a water maser flare observed in W49N.

August 1990–May 1995 — Teaching Assistant, Department of Physics, Virginia Tech, Blacksburg, Virginia

Organized and managed introductory physics laboratories for one year. Taught introductory physics and observational astronomy laboratories. Taught recitation sections as part of the introductory physics course for physics majors.

June 1993–August 1993 — Physics Instructor, Stanley H. Kaplan Center, Blacksburg, Virginia

Taught the physics portion of the Kaplan MCAT preparatory course for pre-med students.

August 1987–August 1990 — Mechanical Engineer, Naval Surface Warfare Center, Carderock, Maryland

Analyzed and reported test data collected while working in the Full Scale Trials branch of the Hydromechanics department. This branch performs speed, powering, and maneuvering trials on all new classes of ships and submarines produced for the U.S. Navy.

August 1986–August 1987 — Mechanical Engineer, Vitro Corporation, Silver Spring, Maryland

Worked in the Command and Control department preparing electrical and mechanical interface control drawings for Trident submarine exterior communications systems.

Publications

Refereed Journals

R Aquarii: First Detection of Circumstellar SiO Maser Proper Motions, D.A. Boboltz, P.J. Diamond, and A.J. Kemball, *The Astrophysical Journal*, submitted

Conference Proceedings

Multi-Epoch VLBA Observations of the SiO Maser Emission Towards R Aquarii (R Aqr), D.A. Boboltz, P.J. Diamond, and A.J. Kemball, 1994, in Radio Emission From Galactic and Extragalactic Compact Sources, IAU colloquium 164, in press.

An H₂O Flare in W49N, D.A. Boboltz, J.H. Simonetti, P.J. Diamond, J.A. Uphoff and B. Dennison, 1993, in *Astrophysical Masers*, edited by A. Clegg and G. Nedoluha, (New York: Springer-Verlag), p.275-278.

A Monitoring Program of Interstellar OH and H₂O Masers, J.H. Simonetti, P.J. Diamond, J.A. Uphoff, D. Boboltz and B. Dennison, in *Astrophysical Masers*, edited by A. Clegg and G. Nedoluha, (New York: Springer-Verlag), p. 311-314.

Papers in Preparation

An H₂O Flare in W49N Modeled as Aligned Rotating Clouds, D.A. Boboltz, J.H. Simonetti, B. Dennison, P.J. Diamond and J.A. Uphoff.

Presentations

Presentations with Abstracts

Observations of the 43-GHz SiO Maser Emission in the Atmosphere of R Aquarii, 189th Meeting of the American Astronomical Society, Toronto, Canada, January 1997. Abstract appeared in *Bulletin of the American Astronomical Society*, 1997, **28**, 1240.

An H₂O Flare in W49N, Conference on Astrophysical Masers, Arlington, Virginia, March 1992.

Colloquia

Imaging the SiO Maser Emission in the Extended Atmosphere of R Aquarii, Presented to the National Radio Astronomy Observatory, Socorro, New Mexico, June 1997.

Memberships

American Astronomical Society, December 1995-present