

Richard E. Denton

Richard E. Denton
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Education:

Ph.D. Department of Physics, University of Maryland, 1986
M.A. Department of Physics, SUNY at Stony Brook, 1979
B.S. Department of Physics, College of William and Mary, 1977

Positions:

2004-Present, Research Professor, Dartmouth College
1995-2004, Research Associate Professor, Dartmouth College
1990-1995, Research Assistant Professor, Dartmouth College
1990, Research Associate, Center for Atomic Energy Research, France
1988-1990, Research Associate, Institute for Fusion Studies, University of Texas, Austin
1987-1988, Research Associate, University of Maryland
1982-1984, Research Associate, Naval Research Laboratory

Courses Taught:

Engineering Electrodynamics (Dartmouth ES120, 2008)
Computational Plasma Physics (Dartmouth Phys118, 2007, 2009)
Plasma Kinetic Theory (Dartmouth Phys111, 1999)
Graduate Level Electrodynamics (Dartmouth Phys106, 1996, 1997)
Undergraduate Level Electrodynamics (Dartmouth Phys66, 1991)
University Physics (NVCC Phy241, Phy242, Phy243, 1979-1980)

Professional Service:

Serve on one to three thesis committees per year
Have advised five Dartmouth Women in Science Program (WISP) students
Review about a half a dozen journal articles and several proposals per year
Served on review panels for NASA (1998, 2002, 2009) and NSF (2005, 2010)
Co-convener of special sessions at American Geophysical Union (AGU) meetings (2002, 2004)
Co-convener of AGU Chapman Conference on ULF Waves (2005)
Co-editor of AGU monograph *Ultra-low Frequency Waves in the Magnetosphere* and special issue of Planetary and Space Science by the same title (2006)
Regularly teach aerospace education at the Lebanon Squadron of the Civil Air Patrol (monthly since 2000). Spoke about Newton's Laws at the Richmond Middle School (2006)
Have participated on several Dartmouth panels discussing science and religion
Invite Dartmouth students to my house for dinner several times per term

Member:

American Geophysical Union

Publications:

Denton, R.E., Z. Kale, K. Takahashi, H.J. Singer, I.R. Mann, T.P. O'Brien, and N.A. Tsygankenko (2010), Test of the constancy of Alfvén frequencies along magnetospheric field lines, to be submitted to J. Geophys. Res.

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Takahashi, K., R.E. Denton, and H.J. Singer (2010), Solar cycle variation of geosynchronous plasma mass density derived from the frequency of standing Alfvén waves, *J. Geophys. Res.*, 115, A07207, doi:10.1029/2009JA015243, 2010.

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R.E. Denton and U. Feldman, The relation of electron temperature to emission measure and limits of increase in emission measure in soft X-ray flares, Astrophys. J. 286, 359 (1984).