

William B. Moore

Position: Professor in Residence
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Professional Experience:

- Professor in Residence, National Institute of Aerospace Jan. 2010 - present
- Associate Professor, Hampton University Jan. 2010 - present
- Associate Research Geophysicist, University of California, Los Angeles July 1997 - Jan. 2010
- Visiting Scientist, Institut de Physique du Globe, Paris June 1998 - Aug. 1998
- Graduate Research Assistant, University of California, Los Angeles Sept. 1991 - July 1997

Education: Ph.D. in Geophysics and Space Physics, University of California, Los Angeles, Jul. 1997
M.S. in Geophysics and Space Physics, University of California, Los Angeles, Jun. 1995
B.S. in Astronomy and Astrophysics, Pennsylvania State University, May 1991.

Current Research:

I research a number of topics related to planetary interiors. I am interested in the coupling between interior dynamics and processes at the surface or beyond. Recent funded research projects include:

- “Evolution of the Earth after the Moon-Forming Impact,” Co-I, NASA Planetary Geology and Geophysics, 2007–2010.
- “A Coupled Orbital-Rotational-Climatic-Deformation Model for Mars,” PI, NASA Mars Fundamental Research, 2005–2008.
- “Rotational Dynamics: New Problems and Theories,” Co-I, NSF Astronomy, 2003–2006.
- “Internal Structure and Dynamics of Europa’s Ice Shell Inferred from Topography and Surface Observations”, Co-I, NASA Planetary Geology and Geophysics, 2003–2006.
- “Windows of Habitability in the Jovian System from Coupled Thermal-Orbital Evolution Models,” PI, NSF Life in Extreme Environments, 1999–2003.
- “Thermal and Dynamical Processes in the Evolution of Planets and Satellites,” Co-I, NASA Planetary Geology and Geophysics, 2001–2003.

Honor/Awards/Activities:

Chancellor’s Award for Postdoctoral Research, UCLA, 2000.
University of California Systemwide IGPP Fellow, 1997.
National Academy of Science Solar System Exploration Decadal Review, member, Large Satellites Panel, 2003.
National Academy of Science Committee to Assess Solar System Exploration, panel member, 2007.
NASA Europa Flagship Orbiter Science Definition Team member, 2007-8.
NASA Outer Planets Assessment Group, steering committee member, 2005-7.
NASA Jupiter Icy Moons Orbiter Science Definition Team, Satellite Interiors co-leader, 2004-5.

Recent Publications:

Moore, W. B., and H. Hussmann, (2008) Thermal Evolution of Europa’s Silicate Interior, to appear in Europa, Univ. of Arizona Press.
Moore, W. B. (2008) The Shape of the Moon and its Thermal and Rotational Evolution, Earth and Planetary Science Letters, Submitted.
Moore, W. B. (2008) Heat Transport in a Convecting Layer Heated from Within and Below, J. Geophys. Res., 113, Article number B11407.
Breuer, D. and W. B. Moore (2007) Dynamics and Thermal History of Terrestrial Planets, the Moon, and Io, in Treatise on Geophysics, vol. 10, G. Schubert, ed., Elsevier.
Moore, W. B., G. Schubert, J. D. Anderson, and J. R. Spencer, (2006) The Interior of Io, in Io After Galileo, R. Lopes and J. R. Spencer, eds., Praxis.