

## Harlan Ernest Spence

**Current Position:** Professor of Astronomy and Chairman, Boston University, Boston, MA  
**Education:** BA, Astronomy and Physics (with distinction), Boston University, 1983  
MS, Geophysics and Space Physics, Univ. Calif., Los Angeles, 1985  
PhD, Geophysics and Space Physics, Univ. Calif., Los Angeles, 1989

**Positions Held:**  
2004 – present Professor of Astronomy, Boston University, Boston, MA  
2002 – present Chairman, Department of Astronomy, Boston University, Boston, MA  
1999 – 2004 Associate Professor of Astronomy, Boston University, Boston, MA  
1997 – present Scientific Consultant, Physical Sciences, Inc.  
1994 – 1999 Assistant Professor of Astronomy, Boston University, Boston, MA  
1993 – present Senior Member of the Technical Staff, The Aerospace Corporation  
1989 – 1993 Member of the Technical Staff, The Aerospace Corporation

**Awards:**  
NASA Group Achievement Awards for POLAR Investigations (CEPPAD/CAMMICE), 1998  
and for The Sun-Earth Connections 2000 Roadmap Team, 2000.  
Recipient of National Science Foundation Young Investigator Award Recipient, 1994-2000  
Editor's Citations for Refereeing Excellence– *Geophys. Res. Letts.*, 1993; *J. Geophys. Res.*, 1990  
AGU Outstanding Student Paper Award, Solar Planetary Relations Section, 1988

### Professional Activities:

Prof. Spence is a supporting member of the AGU. He has served on advisory committees for the NSF, NASA, NOAA, NAS, and NRC; he chairs NASA's MagCon STDT. He was Assoc. Editor of the *J. Geophys. Res.* (91-94) and was a member of the *Geophys. Res. Lett.* Senior Editor Search Committee (96-97). Spence has organized both national and international meetings, most recently the COSPAR 2000 and Yosemite 2004 meetings. He has been PI or co-I on NASA, NSF, DARPA, and DOD theory, analysis, hardware, and mission grants. He is co-I on the NASA GGS/POLAR - CEPPAD and CAMMICE energetic particle experiments and is PI on the cosmic ray instrument, CRaTER, to fly on NASA's Lunar Reconnaissance Orbiter mission in 2008. Spence is the author or co-author of over 80 refereed scientific publications and many National Academy of Sciences committee reports.

### Relevant Recent Publications:

Boudouridis, A., H. E. Spence, and T. G. Onsager, Investigation of magnetopause reconnection models using two co-located, low-altitude satellites: A unifying reconnection geometry, *J. Geophys. Res.*, 106, 29431-26466, 2001.  
Kepko, L, and H. E. Spence, Observations of discrete, global magnetospheric oscillations directly-driven by solar wind density variations, *J. Geophys. Res.*, 108, 1257, 2003.  
Jorgensen, A. M., H. E. Spence, W. J. Hughes, and H. J. Singer, A statistical study of the global structure of the ring current, *J. Geophys. Res.*, 109, A12204, 2004.  
Guild, T., H. E. Spence, L. Kepko, M. Wiltberger, C. Goodrich, J. Lyon, W. Jeffrey Hughes, Plasma Sheet Climatology: Geotail Observations and LFM Model Comparisons, *J. Atmos. Solar Terr. Phys.*, 10.1016/j.jastp.2004.03.021, 2004.  
Spence, H. E., D. Baker, A. Burns, T. Guild, C.-L. Huang, G. Siscoe, and R. Weigel, Center for Integrated Space weather Modeling metrics plan and initial model validation results, *J. Atmos. Sol. Terr. Phys.*, 66, 1499-1507, 2004.  
Zong, Q.-C., T. A. Fritz, H. Spence, et al., Plasmoid in the high latitude boundary/cusp region observed by Cluster, *Geophys. Res. Lett.*, 32, L01101, 2005.