

Sarah Elizabeth Gibson: Biographical Sketch

Professional Preparation

Stanford University, Physics, *BS.*, 1989
The University of Colorado, Astrophysics, *M.S.*, 1993; *Ph.D.*, 1995
NCAR/HAO, Solar Physics, postdoc, 1995-1996
NASA GSFC, Solar Physics, NRC postdoc, 1996-1998
Univ. of Cambridge, Solar Physics, NSF-NATO postdoc, 1999-2000

Appointments

Scientist 3, 2007–present (Sci. II, 2004-2007; Sci. I, 2001-2004; Visiting Scientist, 2001)
High Altitude Observatory, National Center for Atmospheric Research, Boulder, CO 80301
Research Assistant Professor in Physics, 1998-1999; 2000-2001
The Catholic University of America, Washington DC, 2006
NSF-NATO Postdoctoral Fellowship, 1999-2000
Department of Applied Maths. and Theoret. Phys., University of Cambridge, U.K.
National Research Council Postdoctoral Associateship, 1996-1998
NASA Goddard Space Flight Center, Greenbelt, MD, 20771
Postdoctoral Fellow, 1995-1996
High Altitude Observatory, National Center for Atmospheric Research, Boulder, CO 80301

Recent Publications

Coronal prominence structure and dynamics: a magnetic flux rope interpretation, S. E. Gibson and Y. Fan, *JGR*, doi: 10.1029/2006JA011871, 2006
The evolving sigmoid: evidence for magnetic flux ropes in the corona before, during, and after CMES, S. E. Gibson, Y. Fan, T. Toeroek, and B. Kliem, in *Solar Dynamics and its Effects on the Heliosphere and Earth* (Berlin: Springer), *in press*, 2006
The calm before the storm: The link between quiescent cavities and CMEs, S. E. Gibson, D. Foster, J. Burkepile, G. de Toma, and A. Stanger, *ApJ*, 641, 590, 2006
The partial expulsion of a magnetic flux rope, S. E. Gibson and Y. Fan, *ApJL*, 637, L65, 2006.
Observational consequences of a magnetic flux rope emerging into the corona, S. E. Gibson, Y. Fan, C. Mandrini, G. Fisher, and P. Demoulin, *ApJ*, 617, 600, 2004.
Emergence of a magnetic flux rope into a pre-existing coronal arcade, Y. Fan and S. E. Gibson, *ApJ Letters*, 589, L505, 2003.
Three dimensional coronal density structures: Paper 1 – model, S. E. Gibson et al., *JGR*, 108, A12, SSH7-1, CiteID 1444, 2003.
Sigmoid structure and evolution: Results from the third Whole Sun Month campaign, S. E. Gibson, L. Fletcher, D. Alexander, D. A. Biesecker, J. Burkepile, G. Del Zanna, P. Demoulin, C. Mandrini, H. E. Mason, Y. Liu, N. Nitta, C. D. Pike, J. Qiu, Y-K. Ko, B. Schmieder, B. Thompson, *ApJ*, 574, 1021, 2002
3-d and twisted: An MHD interpretation of on-disk observational characteristics of CMEs, S. E. Gibson and B. C. Low, *JGR.*, 105, 18, 187, 2000.

Selected Synergistic Activities

AURA Solar Observatories Council, 2007-2010
Heliophysics Subcommittee of NASA Advisory Council, 2006-2009
Advanced Technology Space Telescope Science Working Group, 2005-
National Research Council Committee on Solar and Space Physics, 2002-2005
AAS/SPD Karen Harvey Prize 2005
Solar Physics Division Committee, 2002-2004