**Charles C. Kankelborg**
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## Education

Ph.D., September 1996 Department of physics, Stanford University, Stanford, CA. Dissertation: "Multispectral observations of coronal X-ray bright points"

B.S. (summa cum laude, Phi Beta Kappa, Sigma Pi Sigma, Phi Kappa Phi), June 1989 Department of Physics, University of Puget Sound, Tacoma, WA Honors thesis: "Instabilities of turbulent vortex wakes"

## Research Interests

Solar magnetic activity; Coronal loops; X-ray bright points; Image analysis; EUV optics and instrument design; space instrumentation, control and telemetry.

## Relevant Experience

2015 - present: Principal Investigator, *EUV Snapshot Imaging Spectrograph* (*ESIS*) sounding rocket investigation, NASA Heliophysics LCAS.

2014 - present: Professor, Department of Physics, Montana State University

2008 - present: Co-Investigator, *Inerface Region Imaging Spectrograph*, NASA Heliophysics Small Explorer mission. Responsible for spectrograph optics.

2001 - 2015: Principal Investigator, *Multi-Order Solar EUV Spectrograph* (*MOSES*) sounding rocket investigation, NASA Heliophysics LCAS.

2007 - 2014: Associate Professor, Department of Physics, Montana State University

2001 - 2007: Assistant Professor, Department of Physics, Montana State University

April 2001 - August 2001: Research Scientist, Department of Physics, Montana State University, Bozeman, MT.

## Service

2012-present: NASA Sounding Rocket Working Group.

2011-2013, Judge for the National Solar Spectrograph Competition. This is part of the public outreach program for the NASA *IRIS* mission.

2009-2012: NASA Heliophysics Subcommittee.

April 2012 - present: Montana Space Grant Consortium Advisory Board

Served on a variety of NASA review panels, including the Solar Probe Plus Standing Review Board (Aug 2009 - Sep 2010), TMC reviews for two major space missions, SR& T, LCAS, and MIDEX science review.

Referee for The Astrophysical Journal, Solar Physics, and others. Chaired poster and oral sessions at AAS/SPD meetings.
Member, American Geophysical Union
Associate Member, Solar Physics Division of the American Astronomical Society
Member, American Scientific Affiliation

## Awards

Spring, 2012: MSU Society of Physics Students Undergraduate Level Instructor Award.
2012: Kavli Frontiers of Science meeting, invited participant.
2011 and 2006: George Tuthill award (outstanding graduate level instructor, selected by the physics graduate students).
2010: Charles & Nora Wiley Faculty Award for Meritorious Research.
Presidential Early Career Award for Scientists & Engineers (PECASE), awarded December 19, 2008 at the White House, "for the development of novel instrumentation for imaging spectroscopy in Solar Physics; and for mentoring undergraduate and graduate students involved in experiments on sounding rockets."

### Selected Publications

Dr. Kankelborg is author or co-author of 35 refereed and 144 total publications.


1. "Fast Differential Emission Measure Inversion of Solar Coronal Data", J. Plowman, C. Kankelborg, and P. Martens, *ApJ*, **771**, 2, (2013).

2. "Exploring the Interface Between the Sun's Surface and Corona", Charles Kankelborg, *Physics Today*, **65**, 72-73, (2012).

3. "Data inversion for the Multi-Order Solar Extreme-Ultraviolet Spectrograph", J. L. Fox, C. C. Kankelborg, and T. R. Metcalf, In *Optical Spectroscopic Techniques and Instrumentation for Atmospheric and Space Research V., Larar, Allen M.; Shaw, Joseph A.; Sun, Zhaobo., eds. Proc. SPIE*, volume 5157, pages 124–132, (2003).

4. "Evidence of Separator Reconnection in a Survey of X-Ray Bright Points", D. W. Longcope, C. C. Kankelborg, J. L. Nelson, and A. A. Pevtsov, *ApJ*, **553**, 429–439, (2001).

5. "Simultaneous imaging and spectroscopy of the solar atmosphere: advantages and challenges of a 3-order slitless spectrograph", C. C. Kankelborg and R. J. Thomas, In *Visible Space Instrumentation for Astronomy and Solar Physics, Oswald H. Siegmund; Silvano Fineschi; Mark A. Gummin; Eds., Proc. SPIE*, volume 4498, pages 16–26, (2001).

6. "Forward modeling of the coronal response to reconnection in an X-ray bright point", C. Kankelborg and D. Longcope, *Sol. Phys.*, **190**, 59–77, (1999).