

New England Space Science Consortium Meeting #26

http://nessc.unh.edu/NESSC_Spring_2018_Meeting.html

Friday May 4, 2018, 10 AM – 5 PM

Room 330/332 Memorial Union, University of New Hampshire

Local Organizers: Nathan Schwadron, Ken Fairchild, Noe Lugaz, Maureen Rodgers, Chuck Smith, Sonya Smith

**The Evolving Solar Wind During a Decade of Historically Low Solar Activity:
Preparing for Parker Solar Probe and Solar Orbiter**

Over more than a decade, Solar and Heliospheric Scientists have observed behavior in the solar wind that is unprecedented through the space age. Solar wind densities, magnetic field strengths and pressures have been exceptionally low, while galactic cosmic ray fluxes have reached new the highest levels in more than 80 years. Solar activity has also been extremely weak during the mini solar maximum of cycle 24. Fundamental to Heliophysics is connection between solar activity, the properties of the solar wind and Heliospheric magnetic field, the nature and frequency of coronal mass ejections, the properties of solar energetic particles and cosmic rays. The physical relationships between these phenomena is a critical area in Heliophysics with wide-reaching implications for space weather, and for upcoming missions including Parker Solar Probe, Solar Orbiter, and the Interstellar Mapping and Acceleration Probe.

We invite you to come to the meeting. If you should decide to come, please send an email to Maureen Rodgers (maureen.rodgers@unh.edu), and if you would like to give a talk, please send a title along with the authors and co-authors to Maureen.

Nathan Schwadron: Worsening radiation environment in the solar system

Jon Bower: The Pickup Ion Cutoff Shift in Stream Interaction Regions and Generally Variable Solar Wind Conditions

Noé: Expansion of Coronal Mass Ejections in Solar Cycle 24 and Its Consequences

Fatemeh Rahmanifard: Increased Galactic Cosmic Radiation From Historically Weak Solar Magnetic Fields

Reka Winslow: Predictions for Parker Solar Probe and Solar Orbiter : ICME Evolution and GCR Modulation in the Innermost Heliosphere

Jim Connell: EHIS on GOES-16 and GOES-17

Deep Solar Activity Minimum 2007-2009: Solar Wind Properties and Major Effects on the Terrestrial Magnetosphere. Authors: C.J. Farrugia, A. B. Galvin and N. Lugaz

The inner source of pickup ions. Phil Quinn

Chuck Smith: pickup ion generated waves from the inner source

Contributions from Group