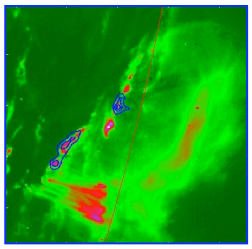
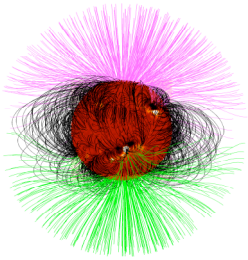
Working Group 2: Interplanetary

The Interplanetary Working Group will be focusing on four areas.

Campaign Events: This is a plenary session involving all three working groups. A number of CME events have been selected for particular attention to better foster the collaboration between modeling and observation. Preliminary details can be found at http://cdaw.gsfc.nasa.gov/CME_list/SHINE2003/.

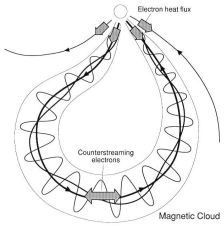


Modeling the Evolution of Photospheric and Coronal Magnetic Fields: This joint session between working groups 1 and 2 follows on from the dynamic discussions on flux transport models and the polar field reversal at last years meeting. Can we utilize the models of the evolutionary behavior of the surface magnetic fields to predict solar wind variability? How good are potential field models for large-scale field connectivity and interplanetary connections?



Following the joint session,Working Group 2's half-day independent session will focus on the modeling and prediction of the ambient solar. The goals of this session are to establish how well we can do using our current solar wind models, highlighting both their strengths and limitations, and to have vigorous, open discussion on what can be done to further improve the modeling and prediction of the ambient solar wind.

Suprathermal Particles: This joint session with Working Group 3 (energetic particles) will focus on the nature and implications of suprathermal particle signatures. We plan to discuss a broad range of issues such as ion and electron counterstreaming, flux dropouts, variable properties of electrons with energy, and transport. We will evaluate their usefulness for discerning disconnected fields and implications for magnetic connection of CMEs to the Sun.



Composition: A full understanding of SEP acceleration requires a knowledge of the source population temperature, energy and rigidity. These may be studied in part by examining elemental and charge state composition in the solar wind and in energetic particles. An outstanding question in SEP acceleration is what role the solar wind may have as a source. This joint session between Working Groups 2 & 3 will consider charge state, elemental and isotopic composition measurements in these three populations. Discussion will concentrate on possible relationships that may be inferred between the solar wind, suprathermals and SEPs accelerated in active regions at the Sun, or in interplanetary shocks.

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