
SECOND ANNOUNCEMENT

38th COSPAR Scientific Assembly
Bremen (Germany), 18-25 July 2010

Event E21: *The Challenge of the Hidden Scales in Solar Dynamic Phenomena*

!!!! THE DEADLINE FOR ABSTRACTS SUBMISSION IS GETTING CLOSE !!!!

Dear colleagues,

You are invited to submit your abstract to the session **E21** of the next *38th COSPAR Scientific Assembly* to be held in Germany (18-25 July, 2010). The session is dedicated to discuss a possible unified picture of the role of small and large scales in the solar atmosphere.

Information concerning this event can be found on the web at:

<http://www.cospar-assembly.org/> and <http://www.cospar2010.org/index.html>

DEADLINE FOR SUBMITTING ABSTRACTS IS FEBRUARY 19, 2010

The Scientific Organizers, Susanna Parenti and Alessandro Bemporad

ABSTRACT

Fine structures at the limit of the instrumental spatial resolution exists at all layers of the solar quiescent an active atmosphere. Examples are confined high intensity photospheric magnetic field, thread-like structure of chromospheric and coronal loops, prominences. However, there are indications that the elementary structures are not yet resolved. Clarify this aspect will put light in the problem of small-large scales coupling in solar phenomena, contributing to solve the long-standing questions of coronal heating, solar wind acceleration and CME triggering. Magnetic reconnection, usually identified as the source for large scale energy releases (flares, CMEs, SEPs), is expected to be activated over very small scales (1-10 m in corona). New small-scale transient events (10^3 - 10^5 km) are continuously discovered all over the Sun (e.g. "micro-CMEs", "streamer puffs", chromospheric "anemone jets") suggesting a "scale-free" phenomenon. All these events could be related to the emergence of small scale magnetic bipoles as those recently resolved in the polar regions. Present and future solar missions (e.g SDO, Solar Orbiter), with their highest spatial and temporal resolutions, will give the opportunity to deeply address these problems. This section will aim at collect observational and theoretical evidences for a possible unified picture of dynamic small and large scales phenomena.

CONFIRMED SOLICITED SPEAKERS:

Axel Brandenburg (Nordita, Sweden)

James A. Klimchuk (NASA Goddard Space Flight Center, USA)

Giannina Poletto (Arcetri Astrophysical Observatory, IT)

Kazunari Shibata (Kwasan Observatory, Kyoto University, Japan)

Alphonse C. Sterling (NASA Marshall Space Flight Center, USA)

SOC

Tahar Amari (Ecole Polytechnique, Fr)

Arnold Benz (Institute of Astronomy, ETH-Zentrum)

Roberto Bruno (INAF-IFSI, IT)

Jerry G. Doyle (Armagh Observatory, UK)

Taro Sakao (ISAS, Jn)

Nicole Vilmer (LESIA-Paris Observatory, Fr)