

COSPAR 2011 Event E1.7: BEYOND THE CONTINUUM: X-RAY LINE SPECTROSCOPY OF COMPACT OBJECTS

ABSTRACT DEADLINE 2012 FEBRUARY 10!!

Third announcement for an event (E1.7) at the
39th COSPAR Scientific Assembly - Mysore, India - 14-22 July, 2012

Duration: 4 half-days

Commission E (Research in Astrophysics from Space)
Sub-commissions: E1 (Galactic and Extragalactic Astrophysics)

Scientific rationale:

The X-ray emission from galactic and extragalactic compact objects is dominated by continuum processes. However, spectral lines, both in emission and absorption, albeit rare, are very sensitive probes of the physical conditions in the vicinity of the central objects. Relativistically broadened iron lines, cyclotron lines, surface lines on neutron stars and accretion disk corona lines have been reported for a large variety of systems as the sensitivity and resolution of instrumentation has improved. Missions currently planned such as ASTRO-H and Athena will bring a considerable advancement to the field, although even lower-resolution instruments can contribute to specific aspects of line spectroscopy. The purpose of this meeting is to bring together scientists working on all different aspects on X-ray line spectroscopy from compact objects in an effort to assess the current status and identify the outstanding questions to be addressed by future missions. Emphasis will be given to overcome physical and technical issues that are currently under debate in order to reinforce the reliability of the various interpretations.

The meeting will be based upon four main topics (see below). For each of them, one invited speaker and three solicited speakers have been selected by the SOC. There is space for a number of 20-minute and 15-minute contributed talks, plus two discussion sessions.

Scientific Organizing Committee:

Tomaso Belloni (Main Scientific Organizer, Italy), Chris Reynolds (Deputy Organizer, USA), Sudip Bhattacharyya (India), Andy Fabian (United Kingdom), Jelle Kaastra (Netherlands), Tim Kallman (USA), Julia Lee (USA), Jon Miller (USA), Kirpal Nandra (Germany), Norbert Schulz (USA), Jörn Wilms (Germany)

Invited and solicited speakers:

Session 1 : Spectral signatures of relativistic accretion disks

A. Fabian (I), L. Brenneman (S), E. Cackett (S), O. Madej (S)

Session 2 : Probes of neutron star magnetospheres and surfaces

S. Bhattacharyya (I), T. Güver (S), D. Maitra (S), J. Wilms (S)

Session 3 : X-ray probes of black hole and neutron star outflows

M Cappi (I), J. Kaastra (S), J. Neilsen (S), F. Tombesi (S)

Session 4 : Environments, ISM, and modeling of astrophysical plasmas

T. Fang (S), J. Garcia (S), C. Pinto (S)

The precise dates of the Event will be announced as soon as they are fixed.

Abstract submissions for all COSPAR 2011 events opened on 2011 August 19.

**** ABSTRACT SUBMISSION DEADLINE IS 2012 FEBRUARY 10 ****

Information on the 38th COSPAR Scientific Assembly can be found at

<http://www.cospar-assembly.org/>

Information on Event E1.7 is available at

<http://www.brera.inaf.it/lines2012/index.html>

Contact email: lines2012@brera.inaf.it