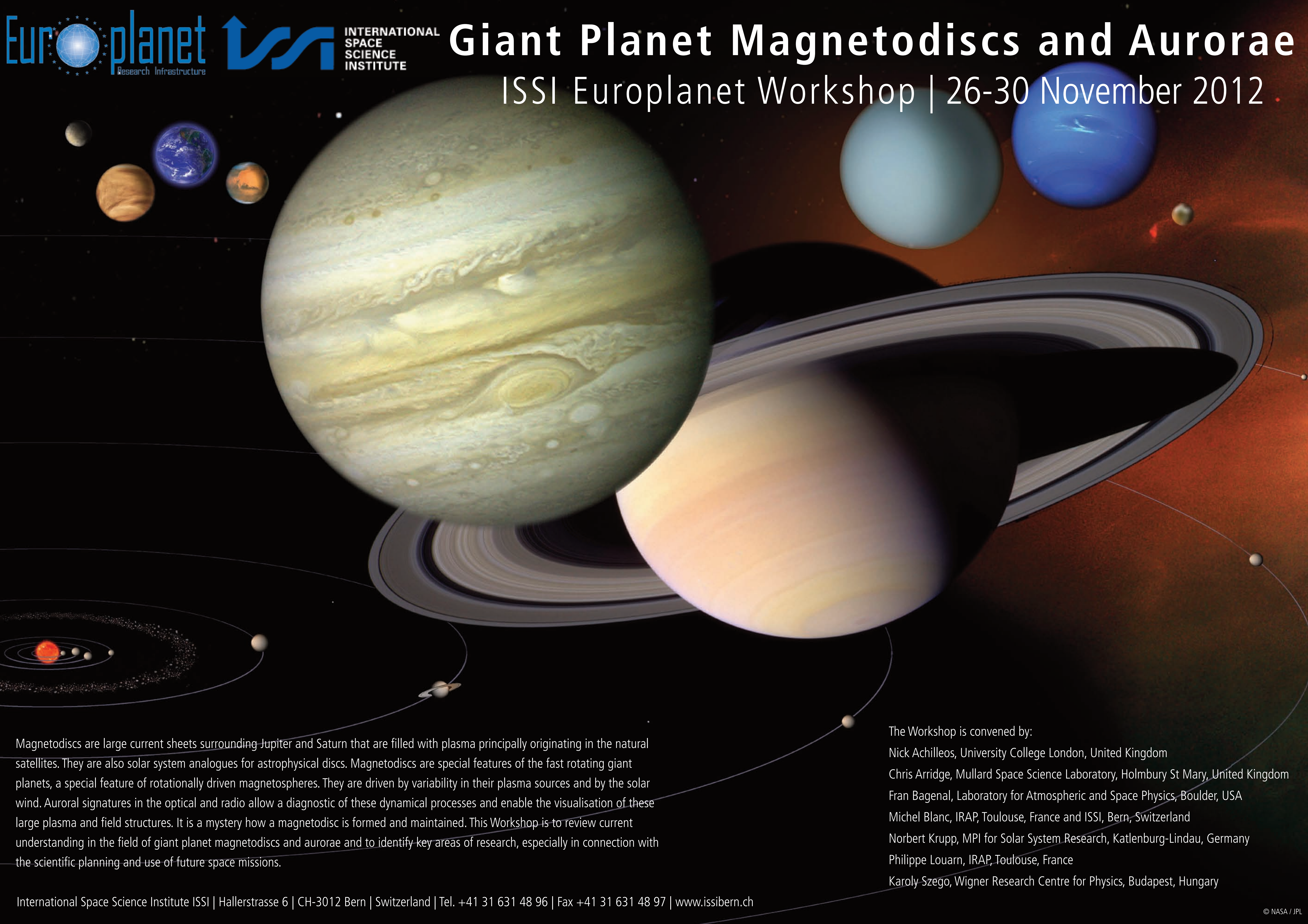


Giant Planet Magnetodiscs and Aurorae

ISSI Europlanet Workshop | 26-30 November 2012



Magnetodiscs are large current sheets surrounding Jupiter and Saturn that are filled with plasma principally originating in the natural satellites. They are also solar system analogues for astrophysical discs. Magnetodiscs are special features of the fast rotating giant planets, a special feature of rotationally driven magnetospheres. They are driven by variability in their plasma sources and by the solar wind. Auroral signatures in the optical and radio allow a diagnostic of these dynamical processes and enable the visualisation of these large plasma and field structures. It is a mystery how a magnetodisc is formed and maintained. This Workshop is to review current understanding in the field of giant planet magnetodiscs and aurorae and to identify key areas of research, especially in connection with the scientific planning and use of future space missions.

The Workshop is convened by:

- Nick Achilleos, University College London, United Kingdom
- Chris Arridge, Mullard Space Science Laboratory, Holmbury St Mary, United Kingdom
- Fran Bagenal, Laboratory for Atmospheric and Space Physics, Boulder, USA
- Michel Blanc, IRAP, Toulouse, France and ISSI, Bern, Switzerland
- Norbert Krupp, MPI for Solar System Research, Katlenburg-Lindau, Germany
- Philippe Louarn, IRAP, Toulouse, France
- Karoly Szego, Wigner Research Centre for Physics, Budapest, Hungary