

**Sessions EPSC , Nantes, 27 Sept. - 2 Oct. 2015, la date limite pour la soumission de résumés est fixée au 29 avril 2015.**

**\* MG1 - Planetary magnetospheres**

Arising from the interaction between planetary bodies with a significant intrinsic magnetic field and the surrounding magnetized plasma, the magnetospheres constitute essential components of the planetary systems. These planetary bodies include either planets embedded into the interplanetary medium, such as Mercury, Earth, Jupiter, Saturn, Uranus, and Neptune, or Ganymede with its magnetosphere nested within Jupiter's one. We invite submissions addressing the various aspects of the magnetospheres, from the configuration to the dynamics, and from the front of the bow shock to the downstream magnetotail. While the basic physical processes at play are the same, the diversity of the interacting environments makes comparative studies particularly relevant to this session. This session will thus be an ideal forum to address the recent advances in our understanding of all these systems. These discussions will be relevant not only for past and current missions, but also for future missions, such as Juno, BepiColombo and JUICE.

**\* MG2 - Comparative auroral processes : from the solar wind to planets**

Auroral emissions have been detected from all explored magnetized planets of the solar system and several of their satellites. Such powerful electromagnetic radiations result from a complex interplay between the sun, the solar wind, the planetary magnetosphere and its moons, the planetary ionosphere and the rings. Auroral processes cover a wide range of wavelengths (from radio to X-rays) with various generation mechanisms, and form a set of valuable diagnostic to remotely probe space plasmas from upper (exo)planetary atmospheres to the heliosphere, magnetosphere-ionosphere coupling etc. and form the basis of modeling studies such as global circulation models. This session welcomes contributions on the most recent results obtained from the large set of planetary and heliospheric observations provided by numerous recent space missions (Cassini, Cluster, STEREO, JUNO, HST, XMM/Chandra...) or older ones (Voyager, Galileo, Wind, Ulysses...) and ground-based observatories (IR and radio telescopes) as well as modeling and theoretical developments, with a special attention for multi-spectral approaches and comparative analysis. A particular focus will be given to recent observing planetary campaigns. We also encourage contributions regarding future prospects in the frame of upcoming missions to Jupiter (JUNO, JUICE), Mercury (Bepi-Colombo) and ongoing projects to Uranus, Neptune and the Earth. This session aims at favouring discussions between terrestrial, solar system and extrasolar system communities.

**\* MG3/GP3 - Juno and Cassini Synergistic Science: Jupiter and Saturn Interior Structure and Magnetospheric Environment**

This session will focus on Jupiter and Saturn interior structure and magnetospheric environments, including gravity and magnetic field measurements; chemical composition; radiation belts, auroral regions, and coupling to the outer magnetosphere and solar wind; atmospheric circulation; gravity-induced ring dynamics; and modeling of the interior to understand the origins of both planets. The topics are relevant to science in both Cassini's end-of-mission orbits and Juno's prime mission.