URSI Symposium

Dear Colleague,

We wish to draw your attention on the following session to be held during the XXXIInd International Union of Radio Science - General Assembly and Scientific Symposium (Montreal, Canada, August 19 - 26th , 2017)

URSI web site: http://www.ursi2017.org

deadline for abstracts is: January 30th 2017

Sincerely,

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Macro/micro-scale kinetic processes at natural boundary layers in terrestrial and planetary environments:

Conveners: B. Lembège (France), I. Shinohara (Japan) and G. Lakhina (India)

Intricated microscopic/macroscopic processes take place over micro/meso/macro-scales. at natural boundary layers. These layers play a important role in the energy and momentum transfert between the solar wind and the planetary magnetosphere and/or between different regions within the magnetosphere itself. These processes are based on various wave-particle interactions, nonlinear effects and nonstationary mechanisms, which control the overall dynamics of these frontiers. The present session welcomes the discussion of recent results issued from theory, mono/multidimensional numerical simulations and experimental data obtained from various space missions. The comparison between these approaches is possible thanks to refined measurements obtained on board of recent multi-spacecraft missions (e.g., Cluster, Themis, MMS,) and to improved simulations. Comparison with data issued from other missions (Geotail, Wind, Double Star,...) are also encouraged. Applications include magnetospheric, ionospheric and space plasma physics. Examples of boundary layers include: (i) collisionless shocks, (ii) the magnetopause, (iii) plasma sheet currents, (iv) nearby/far magnetotail dynamics (including substorms), (v) plasmapause, (vi) potential drops in the ionosphere and cusp dynamics, (vii) basic particle acceleration processes, and (viii) dynamics of interfaces in active space experiments. Any contributions related to these topics are very welcome. Comparative analysis of results dedicated to terrestrial and planetary environments are also strongly encouraged, in order to approach a more synthetic view of their understanding.