Dear Colleague ,

We wish to draw your attention on two sessions to be held during the 14 annual meeting of next AOGS (Singapore, 6 to 11 August, 2017)
web site : http://www.asiaoceania.org/aogs2017

deadline for abstracts is : February 15th 2017

Sincerely,,

Bertrand LEMBEGE

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Session ST 04: Inner/outer frontiers of magnetized /unmagnetized planets: recent advances of their spatial structures and time dynamics .

B. Lembège, G. Lakhina and H. Hasegawa

Different frontiers (internal/external) form through which intricate exchanges of energy and momenta take place, as the solar wind interacts with the environment of a planet. These frontiers may have different spatial features and time-dynamics according to the magnetized/unmagnetized environment of the planet. These exchanges develop over different spatial and temporal scales via different processes. Different approaches are used from magnetohydrodynamics to kinetic treatments for identifying these processes and analysing their impacts on the frontiers dynamics, and the resulting energy partition. A large set of frontiers such as the shock and foreshock areas, the magnetosheath, the magnetopause, the polar cusp, the plasma depletion layer, the nearby/far magnetotail, the plasma and neutral sheets, and the radiation belts play a key role in the local processes of energy/momenta exchanges. Multi satellite missions such as DOUBLE STAR, CLUSTER, THEMIS, MMS (for the terrestrial magnetosphere) and others missions as CASSINI, VENUS EXPRESS, KAGUYA (and more recently MAVEN) have provided a large coverage of information on a wide range of spatial and temporal scales. Results focussed on advances developed for preparing new challenging spacecraft missions such BEPI-COLOMBO and JUICE are also very welcome. More generally, particular interest will be given to the comparison of inner/outer frontiers of magnetized/unmagnetized planets and to related simulation/theoretical works. The aim of this session is to focus on advances obtained recently on these processes, based on experimental data analysis, theoretical models and numerical simulations.

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Session ST 14: Global Solar Wind-planetary Environment Interactions : a Comparative View of Recent Observations, Modeling and Numerical Simulations
D.S. Cai , B. Lembege and K. I. Nishikawa
Numerous approaches are commonly proposed in order to analyze the solar wind-magnetosphere interactions, and the subsequent energy partition taking place through different scales interactions. Many works are based on numerical models using global multidimensional 2D/3D magnetohydrodynamic (MHD), Hybrid , Particle -in cell (PIC) and test particles simulations. The main difficulty is to identify (i) the dominant processes taking place through the frontiers and within the key regions of the magnetosphere, (ii) the scales over which main processes take place, (iii) whether the key regions are appropriately recovered in the different simulations and (iv) how the global energy partition is affected by any change of the solar wind conditions and/or of the interplanetary magnetic field. The purpose of this session is to put together and to compare results issued from different numerical simulation and theoretical approaches, in order to define their

respective advantages and limitations. Reaching such a goal will also be supported by comparing with experimental results. Contributions obtained from experimental, numerical simulation and theoretical results for terrestrial and planetary magnetospheres are very welcome in the session.