Announcement of a Special Issue of *Advances in Space Research* on

**Magnetosphere, Ionosphere and their connection to Space Weather**

Papers are invited for a special topical issue of Advances in Space Research (ASR) entitled "Magnetosphere, Ionosphere and their connection to Space Weather"

This special issue in *Advances in Space Research* is devoted to highlight the latest advances in the study of the terrestrial upper environment, as well as their intimate connection to Space Weather, including its monitoring and forecasting. More specifically, this issue focuses on the response of the Earth's magnetosphere and ionosphere to different external and internal drivers, such as those coming from the Sun (e.g., solar flares), the solar wind (e.g., interplanetary coronal mass ejections), or the lower atmosphere (e.g., gravity waves). As an extension, the impact of these drivers on the magnetospheres of other planets, is also of interest. The variability of cosmic ray fluxes near Earth is also a matter of concern, because of their role as indicators of abrupt changes at the interplanetary space. On a broader prospective, the coupling between different sub-systems of the upper terrestrial environment, which is crucial to understand the state and evolution of the full system, is also one of the key aspects covered in this issue. It includes the variability of fluxes of different populations of energetic particles (e.g., trapped radiation belts) as well as the coupling between thermal ions and neutrals, which can affect the dynamical evolution of the upper atmosphere. Different space missions, networks of ground observatories, and also increasingly sophisticated numerical models, are providing new results on these physical systems. Part of this progress is currently used to monitor and forecast the state of this complex system, and several organizations have active Space Weather programs and activities. Note that this issue concentrates on Magnetospheric and Ionospheric research results. Papers on solar and heliospheric phenomena should be submitted to the special issue on "Recent Results on Solar and Heliospheric Phenomena affecting Earth".

Papers must be submitted electronically to http://ees.elsevier.com/asr. To ensure that all manuscripts are correctly identified for inclusion into the special issue, authors must select "Special Issue: Space Weather Connection" when they reach the "Article Type" step in the submission process.

Submitted papers must be written in English and they should include full affiliation addresses for all authors. Only full-length papers will be considered for publication, subject to peer review by two reviewers. There are no page limits although the length of the paper should be appropriate for the material being presented. While the deadline for submissions is 31 March 2019, papers will be published electronically as soon as they are accepted. The printed issue will be assembled within a reasonable time with late papers being printed in regular issues of ASR. Contributors to this issue will have an opportunity to purchase individual issues once the issue is finalized. All articles will be typeset at no cost to the author; there is a nominal charge for printing color figures although there is no charge for color figures on the electronic version.

Dr. Daniel Gómez (gomez@iafe.uba.ar) and Dr. Sergio Dasso (sdasso@iafe.uba.ar) are the Guest Editors for this special issue. Questions can be directed to Drs. Gómez and Dasso, or to the Co-Editor for Special Issues, Dr. Peggy Ann Shea (sssrc@msn.com).
The general format for submission of papers can be found on the ASR Elsevier web site at http://www.journals.elsevier.com/advances-in-space-research/