Special Issue

Planetary Plasma Environment

Message from the Guest Editor

Solar wind interaction with planetary objects in the solar system generally results in a formation of two distinct boundaries upstream the obstacle, called magnetopause (or, in the case of unmagnetized planets, rather magnetic pileup boundary) and bow shock. The focus of this Special Issue is the magnetospheric plasma environment around the solar system's planetary objects. At lower altitudes, this includes the planetary ionospheres and various factors responsible for their variability, including energetic particle precipitation. Various electromagnetic wave phenomena taking place in the respective magnetospheres are also of interest, as these can ultimately be responsible for the particle energization and/or loss. At larger radial distances, the topic includes the energy coupling between solar wind and the magnetospheres, as well as studies related to the features of and the balance across distinct plasma boundaries. Theoretical and model contributions, as well as observational studies using data from both older and recent satellite missions and ground-based instruments, are envisaged.

Guest Editor

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Message from the Editor-in-Chief

The multidisciplinary journal *Universe* is aiming to follow and, hopefully, to lead to the largest extent as possible the ever-self renovating threads which weave mathematical theories with our understanding of the magnificent natural world. On behalf of all the distinguished members of the Advisory and Editorial Boards, I extend my welcome to this journal and look forward to hearing from the interested contributors and learning about their valuable research.

Editor-in-Chief

Prof. Dr. Lorenzo Iorio
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