



Magnetodynamics of Space Plasmas

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Message from the Guest Editors

Dear Colleagues,

Space plasma physics is an interdisciplinary subject. In addition to motion and energy transfer processes, variations of material are essential to the evolution of magnetized plasmas in space, e.g., the generation and loss processes of space plasmas in the magnetic field, the creation of the auroral plasmas and its emissions, and charge exchange processes in the storm ring current region. This Special Issue aims to provide a valuable forum in which scientists from different fields can share their original articles, review articles and case reports on the evolutions of magnetized plasmas in space and enhance the interdisciplinarity of the subject.

Topics to be covered include, but are not limited to the following:

Plasmasphere and geocorona: Origin and dynamical evolution of the plasmasphere and geocorona; emission from the plasmasphere and geocorona and their imaging observations;

Magnetospheric activities: Magnetic storms; Substorms; Magnetic reconnection; Magnetospheric current system;

Radiation belts: energization and loss mechanisms of the geomagnetic trapped particles; wave-particle interactions;

Aurora dynamics: magnetosphere-ionosphere coupling;

