

Symposium Plasmas in the Solar System (SYPS)

jointly organized by
the Plasma Physics Division (P) and
the Extraterrestrial Physics Division (EP)

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There are many different types of plasma in our solar system. The natural ones range from the hot, dense thermal plasma in the Sun, with fusion plasma in the Sun's core being the main source of energy, to low-density corona and solar wind, to auroras, partially ionized plasma of the ionosphere and lightnings in the Earth's atmosphere, and in general in the atmospheres of other planets as well. The human-generated plasmas in research and industry are mainly found on the Earth's surface, but there has been more than half a century of research into plasma-based electric propulsion systems for our satellites, thousands of which can now be found in Earth orbit. This symposium "Plasmas in the Solar System" will illustrate this broad spectrum of plasmas with selected examples introducing experimental and theoretical methods for their analysis.

Overview of Invited Talks and Sessions

(Lecture hall ELP 6: HS 4)

Invited Talks

SYPS 1.1	Thu	11:00–11:30	ELP 6: HS 4	Energetic Particles in the Turbulent Heliosphere — ●HORST FICHTNER
SYPS 1.2	Thu	11:30–12:00	ELP 6: HS 4	Persistent solar wind forcing of the F2-region ionosphere observed at Tromsø — ●CLAUDIA BORRIES, PELIN IOCHEM
SYPS 1.3	Thu	12:00–12:30	ELP 6: HS 4	In-orbit diagnostics for artificial plasmas created by electric propulsion systems: The Heinrich Hertz Satellite Mission — ●THOMAS TROTTEBERG
SYPS 1.4	Thu	12:30–13:00	ELP 6: HS 4	Plasma-based space propulsion: status and scientific challenges — ●KRISTOF HOLSTE

Sessions

SYPS 1.1–1.4	Thu	11:00–13:00	ELP 6: HS 4	Plasmas in the Solar System
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