

Werk

Jahr: 1983

Kollektion: fid.geo

Signatur: 8 Z NAT 2148:52

Digitalisiert: Niedersächsische Staats- und Universitätsbibliothek Göttingen

Werk Id: PPN1015067948_0052

PURL: http://resolver.sub.uni-goettingen.de/purl?PPN1015067948_0052

LOG Id: LOG_0038

LOG Titel: Vorwort

LOG Typ: section

Übergeordnetes Werk

Werk Id: PPN1015067948

PURL: <http://resolver.sub.uni-goettingen.de/purl?PPN1015067948>

OPAC: <http://opac.sub.uni-goettingen.de/DB=1/PPN?PPN=1015067948>

Terms and Conditions

The Goettingen State and University Library provides access to digitized documents strictly for noncommercial educational, research and private purposes and makes no warranty with regard to their use for other purposes. Some of our collections are protected by copyright. Publication and/or broadcast in any form (including electronic) requires prior written permission from the Goettingen State- and University Library.

Each copy of any part of this document must contain there Terms and Conditions. With the usage of the library's online system to access or download a digitized document you accept the Terms and Conditions.

Reproductions of material on the web site may not be made for or donated to other repositories, nor may be further reproduced without written permission from the Goettingen State- and University Library.

For reproduction requests and permissions, please contact us. If citing materials, please give proper attribution of the source.

Contact

Niedersächsische Staats- und Universitätsbibliothek Göttingen
Georg-August-Universität Göttingen
Platz der Göttinger Sieben 1
37073 Göttingen
Germany
Email: gdz@sub.uni-goettingen.de

Preface

The present special issue of Journal of Geophysics comprises articles which are based on papers given at the recent European Geophysical Society symposium on "Plasma and Energetic Particles in the Magnetosphere", EGS Meeting, 23–27 August 1982, Leeds, UK.

The symposium was held at a time when a wealth of data from a number of spacecraft devoted to the study of the magnetosphere (HEOS, GEOS, ISEE, PROGNOZ) had been sufficiently digested to draw a more comprehensive picture of the dynamical processes acting within the magnetosphere. Improved instrumentation allowed identification of the ion species contributing to the cold and hot magnetospheric plasma. It seems to become increasingly clear that ions heavier than hydrogen cannot always be treated as minor tracer ions, but often dominate the plasma population and may play an important role in the wave-particle interaction. The ionosphere and the solar wind plasma both seem to be the source of the plasma in the magnetosphere. Recent results from Dynamics Explorer indicate that ionospheric ion beams flow out from the polar caps

and may be as important a source of the tail-lobe plasma as the polar wind. High temporal resolution and simultaneous observation on two or more spacecraft at different positions (e.g. ISEE-1 and -2) in the magnetosphere allowed the separation of temporal and spatial structures necessary to study various boundary phenomena in the magnetosphere.

In order to summarize the present knowledge of the magnetospheric dynamics the major part of the symposium was devoted to invited speakers.

The special issue follows basically the order of the symposium. Unfortunately, not all papers materialized. Nevertheless, this issue will give a good overview of the present knowledge of the physics of the magnetosphere, useful to the interested scientific community.

The Journal Editor thanks all the referees for their efforts and support.

D. Hovestadt
J. Untiedt