

*The first book to consolidate research
on magnetotail physics —*

Magnetotail Physics

edited by
Anthony T. Y. Lui

In the twenty years since the discovery of geomagnetic tails, magnetotail research has advanced from speculation and early space exploration to in-depth theoretical analysis, numerical simulations, and active experimentation. Magnetotails are now recognized as one of the vital components of the complex plasma systems of interplanetary space.

Magnetotail Physics brings together the contributions of specialists from around the world, who present research from the field's frontiers. Each section of the book leads off with a review chapter for scientists working in related areas. Among the specific areas explored are the formation and dynamics of magnetotails, the behavior of individual particles, and the use of computer simulations in research. The text is supplemented with more than 300 illustrations, including 10 color and 2 stereoscopic reproductions. A stereo viewer is included with the book.

Contents:

- **A Historical Perspective**
- **Magnetotail Configuration**
- **Magnetohydrodynamic Aspects of Magnetotail Dynamics**
- **Kinetic Aspects of Magnetotail Dynamics**
- **Active Diagnosis of Magnetotails**
- **Magnetotails of Celestial Objects**
- **Dialog on Controversial Topics**
- **Summary**

*Johns Hopkins Studies in Earth and
Planetary Sciences*

Owen M. Phillips and Steven M. Stanley,
consulting editors

\$40.00



**THE
JOHNS HOPKINS
UNIVERSITY PRESS**

701 West 40th Street, Suite 275
Baltimore, Maryland 21211

JOURNAL OF PLASMA PHYSICS

Volume 38 Part 1 August 1987

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CAMBRIDGE UNIVERSITY PRESS

THE PITT BUILDING, TRUMPINGTON STREET, CAMBRIDGE CB2 1 RP
32 EAST 57TH STREET, NEW YORK, NY 10022, USA
10 STAMFORD ROAD, OAKLEIGH, MELBOURNE 3166, AUSTRALIA

Printed in Great Britain by the University Press, Cambridge