

Table of Contents

Lecture 1. Dipole Magnetic Field and Equations of Magnetic Field Lines

Lecture 2. Dipole Field (old lecture)

Lecture 3. Periodic Motions and Drift Motions in Plasma

Lecture 4. Frozen-in Flux in Magnetohydrodynamic Plasma

Lecture 5. Structure of Quiet-time Earth Magnetosphere

Lecture 6. Linear Waves in Magnetohydrodynamic Plasma

Appendix A. Curvature Drift

Appendix B. Grad B Drift

Appendix C. Magnetic Pressure Gradient Force and Magnetic Tension Force

Textbook:

Introduction to Space Physics, edited by M. G. Kivelson and C. T. Russell, Cambridge University Press, 1995. (ISBN 0-521-45714-9)

Reference Book:

Parks, G. K., *Physics of Space Plasmas: An Introduction*, 2nd ed., Westview Press, Boulder, Colorado, 2004. (ISBN 0-8133-4129-9)

Useful Web Sites:

NRL Plasma Formulary

<http://wwwppd.nrl.navy.mil/nrlformulary/nrlformulary.html>