1. Record Nr. UNINA990000804040403321

Titolo	Il Palazzo Reale di Napoli / Mario A. De Cunzo ... [et al.]
Pubbl/distr/stampa	Napoli : Casa editrice Fausto Fiorentino, [199.]
Descrizione fisica	219 p. : ill. ; 28 cm
Locazione	FARBC DARST
Collocazione	SEZ.NA B 1263 30.1122
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910830631503321

Autore	Menk Frederick W
Titolo	Magnetoseismology [[electronic resource]] : ground-based remote sensing of Earth's magnetosphere / / Frederick W. Menk and Colin L. Waters
Pubbl/distr/stampa	Weinheim, : Wiley-VCH, c2013
ISBN	3-527-65207-8 3-527-65205-1 3-527-65208-6
Descrizione fisica	1 online resource (281 p.)
Altri autori (Persone)	WatersColin L
Disciplina	538.766
Soggetti	Magnetosphere Magnetospheric physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Magnetoseismology: Ground-based remote sensing of the Earth's

magnetosphere; Contents; Preface; Color Plates; 1 Introduction; 1.1 Purpose of This Book; 1.2 The Solar Wind; 1.3 Fluctuations in the Solar Wind; 1.4 Early Observations of Geomagnetic Variations; 1.5 Properties of Geomagnetic Variations; 2 The Magnetosphere and Ionosphere; 2.1 The Geomagnetic Field; 2.2 Structure of Earth's Magnetosphere; 2.3 Magnetospheric Current Systems; 2.3.1 Magnetopause Current; 2.3.2 Tail Current and Reconnection; 2.3.3 Ring Current; 2.3.4 Field-Aligned Currents; 2.3.5 Ionospheric Currents
2.4 The Radiation Belts2.5 The Inner Magnetosphere; 2.6 Formation and Properties of the Ionosphere; 2.7 Geomagnetic Disturbances; 2.8 Space Weather Effects; 3 ULF Plasma Waves in the Magnetosphere; 3.1 Basic Properties of a Plasma; 3.2 Particle Motions; 3.2.1 Motions of Isolated Charged Particles; 3.2.2 First Adiabatic Invariant; 3.2.3 Second Adiabatic Invariant; 3.2.4 Third Adiabatic Invariant; 3.3 Low-Frequency Magnetized Plasma Waves; 3.3.1 Equations of Linear MHD; 3.3.2 The Wave Equation; 3.4 The Shear Alfv en Mode in a Dipole Magnetic Field; 3.4.1 Toroidal Oscillation of Field Lines
3.5 MHD Wave Mode Coupling in One Dimension3.6 An Alternative Derivation of the Plasma Wave Equation, from Electromagnetism; 4 Sources of ULF Waves; 4.1 Introduction; 4.2 Exogenic Sources; 4.3 Boundary Instabilities; 4.4 Field Line Resonances; 4.5 Cavity and Waveguide Modes; 4.6 Spatially Localized Waves; 4.7 Ion Cyclotron Waves; 5 Techniques for Detecting Field Line Resonances; 5.1 Introduction; 5.2 Variation in Spectral Power with Latitude; 5.3 Variation of Phase with Latitude; 5.4 Wave Polarization Properties; 5.5 Spectral Power Difference and Division; 5.6 Single Station H/D
5.7 Cross-Phase from Latitudinally Separated Sensors5.8 Using ULF Wave Polarization Properties; 5.9 Automated Detection Algorithms; 6 Ground-Based Remote Sensing of the Magnetosphere; 6.1 Estimating Plasma Mass Density; 6.2 Travel Time Method of Tamao; 6.3 Determining Electron Density; 6.4 Verification of Ground-Based Mass Density Measurements; 6.5 Determining Ion Concentrations; 6.6 Field-Aligned Plasma Density; 6.7 Plasma Density at Low Latitudes; 6.8 Plasma Density at High Latitudes; 7 Space Weather Applications; 7.1 Magnetospheric Structure and Density; 7.2 Plasmapause Dynamics
7.3 Density Notches, Plumes, and Related Features7.4 Refilling of the Plasmasphere; 7.5 Longitudinal Variation in Density; 7.6 Solar Cycle Variations in Density; 7.7 Determining the Open/Closed Field Line Boundary; 7.8 Determining the Magnetospheric Topology at High Latitudes; 7.9 Wave-Particle Interactions; 7.10 Radial Motions of Flux Tubes; 8 ULF Waves in the Ionosphere; 8.1 Introduction; 8.2 Electrostatic and Inductive Ionospheres; 8.3 ULF Wave Solution for a Thin Sheet Ionosphere; 8.4 ULF Wave Solution for a Realistic Ionosphere; 8.5 FLRs and the Ionosphere
8.6 Remote Sensing ULF Electric Fields in Space

Sommario/riassunto

This book provides a comprehensive account of magnetoseismology - the tool to monitor space weather. Written by researcher on the forefront of this field, it conveys the physics behind the phenomena and the methods to detect and investigate them, the relevance to communication, power supply and many other critical systems. In addition, it provides computational codes for analysis and evaluation.