Record Nr. UNINA9910144607603321 Cosmic Magnetic Fields [[electronic resource] /] / edited by Richard **Titolo** Wielebinski, Rainer Beck Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, . 2005 **ISBN** 3-540-31396-6 Edizione [1st ed. 2005.] 1 online resource (XIV, 279 p. Also available online.) Descrizione fisica Collana Lecture Notes in Physics, , 0075-8450 ; ; 664 520 Disciplina Soggetti Astronomy Astrophysics Computer mathematics Astronomy, Astrophysics and Cosmology Astrophysics and Astroparticles Computational Science and Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Magnetic Fields in the Early Universe -- Magnetic Fields in Galaxy Systems, Clusters and Beyond -- Magnetic Fields in Galaxies -- The Origin of Galactic Magnetic Fields -- Magnetic Fields in the Milky Way, Derived from Radio Continuum Observations and Faraday Rotation Studies -- Mesoscale Magnetic Structures in Spiral Galaxies --Magnetic Fields in Diffuse HI and Molecular Clouds -- Stellar Magnetic Fields -- Importance of Magnetic Helicity in Dynamos -- Numerical Magnetohydrodynamics in Astrophysics. While magnetic fields permeate the universe on all scales, the present Sommario/riassunto book is dedicated to their investigation on the largest scales and affords a balanced account of both theoretical and observational aspects. Written as a set of advanced lectures and tutorial reviews. which lead up to the forefront of research, this book offers both a modern source of reference for the experienced researchers as well as a high-level introductory text for postgraduate students and nonspecialist researchers working in related areas.