Record Nr. UNINA9910811552703321 Autore Meyer-Vernet Nicole Titolo Basics of the solar wind / / Nicole Meyer-Vernet Cambridge,: Cambridge University Press, 2007 Pubbl/distr/stampa **ISBN** 1-107-15909-1 1-280-75029-4 9786610750290 0-511-26936-6 0-511-26992-7 0-511-26835-1 0-511-32050-7 0-511-53576-7 0-511-26902-1 Edizione [1st ed.] 1 online resource (xiv, 463 pages) : digital, PDF file(s) Descrizione fisica Collana Cambridge atmospheric and space science series Disciplina 523.580151 Solar wind - Mathematics Soggetti Sun Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Title from publisher's bibliographic system (viewed on 05 Oct 2015). Nota di bibliografia Includes bibliographical references and index. Nota di contenuto The wind from the sun: introduction -- Tool kit for space plasma physics -- Anatomy of the sun -- The outer solar atmosphere -- How does the solar wind blow? -- Structure and perturbations -- Bodies in the wind: dust, asteroids, planets and comets -- The solar wind in the universe. Sommario/riassunto The Sun continually ejects matter into space, blowing a huge bubble of supersonic plasma. This solar wind bathes the whole solar system and shapes all planetary environments. The growth of space technology has considerably increased our knowledge of this medium. This 2007 book presents an introduction to the subject, starting with basic principles and including all the latest advances from space exploration and theory. It contains a short introduction to plasma physics and discusses

> the structure of the solar interior and atmosphere, the production of solar wind and its perturbations. It explains the objects of the Solar

System, from dust to comets and planets, and their interaction with the solar wind. The final sections explore the astrophysical point of view. The topics are treated at various levels of difficulty both qualitatively and quantitatively. This book will appeal to graduate students and researchers in earth and atmospheric sciences, and astrophysics.