Record Nr. UNISA996466706903316 The Environments of the Sun and the Stars [[electronic resource] /] / Titolo edited by Jean-Pierre Rozelot, Coralie Neiner Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, . 2013 **ISBN** 3-642-30648-9 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (XI, 253 p. 152 illus., 21 illus. in color.) Collana Lecture Notes in Physics, , 0075-8450 ; ; 857 Disciplina 520 Soggetti Observations, Astronomical Astronomy—Observations Planetology **Astrophysics** Space sciences Astronomy, Observations and Techniques Astrophysics and Astroparticles Space Sciences (including Extraterrestrial Physics, Space Exploration and Astronautics) Sun Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Based on a CNRS summer school held in Roscoff, France, in 2011. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Part I: Rezeau: Discontinuities and turbulence in the solar wind -- Vial: Nature and variability of plasmas ejected by the Sun -- Georgieva: Space weather and space climate -- Part II: Mathis: Tides in planetary systems: a physical picture -- Millour: Interactions in massive binary stars as seen by interferometry -- Part III: Malbet: Very close environments of young stars -- Alecian: An Introduction to Accretion Disks -- ud-Doula: Stellar Winds, Magnetic Fields and Disks -- Petit: Magnetic field and convection in the cool supergiant Betelgeuse --Chesneau: The formation of circumstellar disks around evolved stars. Based on lectures given at a CNRS summer school in France, this book Sommario/riassunto covers many aspects of stellar environments (both observational and theoretical) and offers a broad overview of the field. More specifically,

Part I of the book focuses on the Sun, the properties of the ejected

plasma, of the solar wind and on space weather. The second part deals with tides in planetary systems and in binary stellar systems, as well as with interactions in massive binary stars as seen by interferometry. Finally the chapters of Part III discuss the environments of young or evolved stars, stellar winds, agnetic fields and disks. With its broad approach the book will provide advanced students as well as researchers with a good overview of the environments of the Sun and the stars.