1. Record Nr. UNINA9910132758803321

Titolo	The environments of the sun and the stars / / Jean-Pierre Rozelot, Coralie Neiner, editors
Pubbl/distr/stampa	Berlin ; ; New York, : Springer, c2013
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 ; ; v. 857
Altri autori (Persone)	RozelotJ.-P <1942-> (Jean-Pierre) NeinerC (Coralie)
Disciplina	520
Soggetti	Solar atmosphere Space environment Plasma astrophysics 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.
Nota di bibliografia	Includes bibliographical references and index.
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.
Sommario/riassunto	Based on lectures given at a CNRS summer school in France, this book 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.