1. Record Nr. UNINA9910257400603321 Coronal Magnetic Energy Releases [[electronic resource]]: Proceedings **Titolo** of the CESRA Workshop Held in Caputh/Potsdam, Germany 16-20 May 1994 / / edited by Arnold O. Benz, Albrecht Krüger Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-540-49189-9 Edizione [1st ed. 1995.] 1 online resource (X, 286 p.) Descrizione fisica Lecture Notes in Physics, , 0075-8450 ; ; 444 Collana 523.7/5 Disciplina Soggetti Geophysics Space sciences Elementary particles (Physics) Quantum field theory Lasers **Photonics** Geophysics/Geodesy Space Sciences (including Extraterrestrial Physics, Space Exploration and Astronautics) Elementary Particles, Quantum Field Theory Optics, Lasers, Photonics, Optical Devices Sun Corona Congresses Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Flares and coronal heating in the sun and stars -- Imaging. stereoscopy, and tomography of the solar corona in soft X-rays and radio -- Initial results from the Nobeyama Radiobeliograph -- Longduration non thermal energy release in flares and outside flares --Characteristics of two simple microwave bursts -- Retrieving information from digital solar radio spectrograms -- Coupled magnetohydrodynamic and kinetic development of current sheets in

the solar corona -- Acceleration and radiation from a complex active region -- Flares in accretion disks -- Non-linear data analysis and statistical techniques in solar radio astronomy -- Interplanetary

scintillation imaging of disturbances in the solar wind -- Theory and observations of coronal shock waves -- Numerical simulations of shock electron acceleration in solar physics -- Surprises in the radio signatures of CMEs -- The SOHO mission -- SUMER — Solar Ultraviolet Measurements of Emitted Radiation -- EIT: The extreme ultraviolet imaging telescope -- The Ultraviolet Coronagraph Spectrometer -- The charge, element, and isotope analysis system CELIAS on SOHO.

Sommario/riassunto

This book brings together a variety of review articles on dynamical phenomena in the solar corona in order to work out the unifying aspects of magnetic energy releases. The experimental data from groundbased methods of radio astronomy as well as from satellites are also discussed. The book addresses researchers in astrophysics, and planetary science but should also be accessible to graduate students.