Record Nr. UNISA996466694603316 Coronal Physics from Radio and Space Observations [[electronic **Titolo** resource]]: Proceedings of the CESRA Workshop Held in Nouan le Fuzelier, France, 3–7 June 1996 / / edited by Gerard Trottet Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-540-68693-2 Edizione [1st ed. 1997.] 1 online resource (XVII, 226 p. 68 illus., 4 illus. in color.) Descrizione fisica Lecture Notes in Physics, , 0075-8450;; 483 Collana 523.7/5 Disciplina Soggetti Space sciences Observations, Astronomical Astronomy—Observations **Astrophysics** Physical measurements Measurement Space Sciences (including Extraterrestrial Physics, Space Exploration and Astronautics) Astronomy, Observations and Techniques Astrophysics and Astroparticles Measurement Science and Instrumentation 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 Diagnostics of energy release in the X-ray corona -- Solar flare radio and hard X-ray observations and the avalanche model -- Radio observations of the quiet sun and their implications on coronal heating -- Energy release in the solar corona -- Observations of the 3D distributions of thermal to near-relativistic electrons in the interplanetary medium by the wind spacecraft -- Coronal and interplanetary particle beams -- Coronal mass ejections and type II radio bursts -- Shock waves and coronal mass ejections -- An upgrade of nobeyama radioheliograph to a dual-frequency (17 and 34 GHz)

system -- The nancay radioheliograph -- Recent developments of the

solar Submm-wave telescope (SST) -- Solar astronomy and the Square Kilometer Array Interferometer -- Prospects for the solar radio telescope.

Sommario/riassunto

This volume provides an overview of our current understanding of the physics related to: coronal structures and coronal heating; large-scale coronal shock waves and coronal mass ejections; particle beams in the solar corona and in the interplanetary medium; and explosive energy-release phenomena and particle acceleration. The different articles give a well-balanced presentation of relevant observations based upon various techniques, models and theories, providing a global view of these phenomena and of the underlying physics. In-situ measurements of particles and waves with ULYSSES and WIND and spectral and imaging data from SOHO and YOHKOH provide an unprecedented richness of relevant data. For their better understanding, radio observations - also included in this book - play a key role.