Record Nr. UNINA9910257424603321 Supernova Shells and Their Birth Events [[electronic resource]]: **Titolo** Proceedings of a Workshop Held at Physikzentrum Bad Honnef March 7-11, 1988 / / edited by Wolfgang Kundt Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-540-46001-2 Edizione [1st ed. 1988.] 1 online resource (VIII, 256 p. 57 illus.) Descrizione fisica Lecture Notes in Physics, , 0075-8450;; 316 Collana 520 Disciplina Soggetti Observations, Astronomical Astronomy—Observations **Astrophysics** Geophysics Astronomy, Observations and Techniques Astrophysics and Astroparticles Geophysics/Geodesy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Interpretation of Supernova Shells -- Evolution of the morphology of supernova remnants with pulsars -- On the distances of the remnants of historical type I supernovae -- Spectral index variations in supernova remnants -- Statistical studies of SNRs: Selection effects -- The Galactic distribution of radio supernova remnants -- Statistical properties of recently new identified supernova remnants -- X-ray observations and non-equilibrium ionisation of supernova remnants --Shock-cloud interactions in supernova remnants -- Interpretation difficulties of SNR shock spectra -- The origin of Kepler's supernova remnant -- CTB80: The supernova remnant with (almost) everything --G316.3-0.0 and G332A+0.1 — Two supernova remnants with blowouts -- Puppis a and its environment as revealed by infrared observations --High resolution radio observations of G11.2-0.3 -- G70.7 + 1.2: Supernova remnant? -- A molecular cloud in the direction of G70.

68+1.20 -- Detection of four supernova remnants in the polarized

emission from the Effelsberg 11 cm survey -- Kinematics of optical filaments in the Cygnus Loop -- X-ray observations of the supernova remnant G292.0+1.8 -- Recent results from supernova calculations -- Supernova structure and light curves -- What are the masses of SNIb progenitors? -- Type Ib supernovae: What they may be and what they are not -- Ultraviolet observations of SN 1987A -- X rays from SN 1987A: A partially obscured plerion -- Supernova VLBI -- The compact radio sources in the galaxy M82 - Supernova-remnants and/or recent supernovae - -- The supershells of the large magellanic cloud and their importance for the interstellar medium -- Extended onion-shell model for cosmic ray spectra produced by supernova remnants -- Epilogue.

Sommario/riassunto

For a better understanding of supernova explosions the contributors to this volume provide researchers and graduate students in astrophysics with a broad spectrum of alternatives. The confrontation of different theories in one volume should prompt further exploration of the driving piston for the explosions and deeper understanding of the experimental data. Properties of supernova shells are discussed, such as their kinematics, ages, sizes, temperatures, spectra, polarizations, energetics and morphologies. Special attention is given to a few shells of extreme age, viz. G 70.68+1.20, Kepler's SN, and CTB 80, as well as to their statistics.