Record Nr. UNINA9910257381603321 Hadrons in Dense Matter and Hadrosynthesis [[electronic resource]]: **Titolo** Proceedings of the Eleventh Chris Engelbrecht Summer School Held in Cape Town, South Africa, 4-13 February 1998 / / edited by Jean Cleymans, Hendrik B. Geyer, Frederik G. Scholtz Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 1999 **ISBN** 3-540-49483-9 Edizione [1st ed. 1999.] Descrizione fisica 1 online resource (XII, 252 p. 50 illus.) Collana Lecture Notes in Physics, , 0075-8450 ; ; 516 Disciplina 539.7/216 Soggetti **Nuclear physics** Astronomy **Astrophysics** Particle and Nuclear Physics Astronomy, Astrophysics and Cosmology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Pion and kaon production as a probe for hot and dense nuclear matter Nota di contenuto -- Fluid dynamics for relativistic nuclear collisions -- The use of statistical mechanics to describe hadron production in high energy collisions -- to light cone field theory and high energy scattering --Chiral symmetry breaking in hot matter -- Physics and astrophysics of strange quark matter -- Out of equilibrium thermal field theories — Elimination of pinching singularities -- Exact conservation of quantum numbers in the statistical description of high energy particle reactions. In seven lectures of a pedagogical nature aimed at both researchers Sommario/riassunto and graduate students the authors review important aspects of hadronic physics. The book contains a comprehensive review of recent experimental results obtained at the GSI collider. In particular, it covers chiral symmetry at finite temperature and statistical methods applied to relativistic heavy ion collisions and gives a detailed presentation of the astrophysics of strange quark matter.