1. Record Nr. UNINA9910619462703321 Autore Dexheimer Veronica Titolo Properties and Dynamics of Neutron Stars and Proto-Neutron Stars MDPI - Multidisciplinary Digital Publishing Institute, 2022 Pubbl/distr/stampa **ISBN** 3-0365-5400-9 Descrizione fisica 1 electronic resource (252 p.) Soggetti Research & information: general **Physics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Following new developments in the measurement of gravitational waves Sommario/riassunto from neutron-star mergers and the modification or construction of particle colliders to reach larger densities, we are entering a new era, during which we can begin to understand dense and hot matter for the first time. This, together with future supernova explosion data, will provide us with the opportunity to have truly multimessenger data on hot and dense matter, which is, to some extent, similar to the matter present in the core of proto-neutron stars. This Special Issue focuses on the theory necessary to understand present and future data. It includes state-of-the-art theoretical models that describe dense and hot matter and dynamical stellar simulations that make use of them, with the ultimate goal of determining which degrees of freedom are relevant under these conditions and how they affect the matter

equation of state and stellar evolution.