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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Microscopic Theory of the Nuclear Equation of State and Neutron Star Structure -- Superfluidity in Neutron Star Matter -- Relativistic Superfluid Models for Rotating Neutron Stars -- The Tensor Virial Method and Its Applications to Self-Gravitating Superfluids -- Neutron Star Crusts -- Kaon Condensation in Neutron Stars -- Phases of QCD at High Baryon Density -- Diquarks in Dense Matter -- Color Superconductivity in Compact Stars -- Strange Quark Stars: Structural Properties and Possible Signatures for Their Existence -- Phase Diagram for Spinning and Accreting Neutron Stars -- Signal of Quark Deconfinement in Millisecond Pulsars and Reconfinement in Accreting X-ray Neutron Stars -- Supernova Explosions and Neutron Star Formation -- Evolution of a Neutron Star from Its Birth to Old Age -- Neutron Star Kicks and Asymmetric Supernovae -- Spin and Magnetism in Old Neutron Stars -- Neutrino Cooling of Neutron Stars: Medium Effects.
Sommario/riassunto	Neutron stars are the densest observable bodies in our universe. Born during the gravitational collapse of luminous stars - a birth heralded by spectacular supernova explosions - they open a window on a world

where the state of the matter and the strengths of the fields are anything but ordinary. This book is a collection of pedagogical lectures on the theory of neutron stars, and especially their interiors, at the forefront of current research. It addresses graduate students and researchers alike, and should be particularly suitable as a text bridging the gap between standard textbook material and the research literature.
