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Soggetti	Astrophysics Gravitation Particles (Nuclear physics) General relativity (Physics) Gravitational Physics Particle Physics General Relativity
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Note generali	Includes index.
Nota di contenuto	The Nature of the Physical World: Elementary Particles and Interactions -- Elementary Processes at High Energies -- Detection and Instrumentation in High-Energy Astrophysics -- Stellar Evolution up to the Final Stages -- Supernovae.
Sommario/riassunto	This textbook is designed to serve as a link between the basic disciplines of physics and the frontier topics within high energy astrophysics, aiming at a level of difficulty congruent with that of other physics topics studied at undergraduate level. Therefore, this preparatory and introductory text serves as a gateway to a more detailed study of many of the most interesting and complex phenomena being investigated by contemporary astrophysics. Among others, these include: the evolution of stars, supernovae, neutron stars, black holes, solar neutrinos, and - importantly - the exciting new field of gravitational wave astronomy. The book is supplemented by a collection of problems with which students can test their understanding of the material presented.

