1. Record Nr. UNISALENTO991002857809707536 Autore Choudhuri, Arnab Rai Titolo Astrophysics for physicists / Arnab Rai Choudhuri Cambridge, UK; New York: Cambridge University Press, 2010 Pubbl/distr/stampa **ISBN** 9780521815536 (hardback) Descrizione fisica xviii, 471 p.: ill.; 26 cm Classificazione LC QB461 52.9.51 Disciplina 523.01 Soggetti Astrophysics - Textbooks Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index Nota di contenuto Machine generated contents note: 1. Introduction: 2. Interaction of radiation with matter; 3. Stellar astrophysics I: basic theoretical ideas and observational data; 4. Stellar astrophysics II: nucleosynthesis and other advance topics: 5. End states and stellar collapse: 6. Our galaxy and its interstellar matter; 7. Elements of stellar dynamics; 8. Elements of plasma astrophysics; 9. Extragalactic astronomy; 10. The spacetime dynamics of the Universe; 11. The thermal history of the Universe; 12. Elements of tensors and general relativity; 13. Some applications of general relativity; 14. Relativistic cosmology; Appendixes; References; Index. Sommario/riassunto "Designed for teaching astrophysics to physics students at advanced undergraduate or beginning graduate level, this textbook also provides an overview of astrophysics for astrophysics graduate students, before they delve into more specialized volumes. Assuming background knowledge at the level of a physics major, the textbook develops astrophysics from the basics without requiring any previous study in astronomy or astrophysics. Physical concepts, mathematical derivations and observational data are combined in a balanced way to provide a unified treatment. Topics such as general relativity and plasma physics, which are not usually covered in physics courses but used extensively

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