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| 1. Record Nr. | UNINA9910146551103321 |
| Titolo | The invisible universe : dark matter and dark energy // L. Papantonopoulos (editor) |
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| ISBN | 1-281-04344-3 9786611043445 3-540-71013-2 |
| Edizione | [1st ed. 2007.] |
| Descrizione fisica | 1 online resource (442 p.) |
| Collana | Lecture notes in physics ; ; 720 |
| Disciplina | 523.1126 |
| Soggetti | Missing mass (Astronomy) Dark matter (Astronomy) Dark energy (Astronomy) |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Dark Matter: The Missing Matter of the Universe as Seen by Astroparticle Physics and Astrophysics -- Particle Physics Approach to Dark Matter -- LSP as a Candidate for Dark Matter -- On the Direct Detection of Dark Matter -- Galaxy Formation and Dark Matter -- Dark Energy: The Energy Balance of the Universe within the Standard Cosmological Model -- Cosmological Parameters from Galaxy Clusters: An Introduction -- Cosmological Constraints from Galaxy Clustering -- Dark Energy and the Microwave Background -- Models of dark energy -- Accelerating Universe: Observational Status and Theoretical Implications -- Dark Matter and Dark Energy Beyond the Standard Theory of General Relativity -- The Physics of Extra Dimensions -- Dark Energy from Brane-world Gravity -- The Issue of Dark Energy in String Theory -- Modified Gravity Without Dark Matter -- Avoiding Dark Energy with 1/R Modifications of Gravity. |
| Sommario/riassunto | The nature and essence of Dark Matter and Dark Energy have become the central issue in modern cosmology over the past years as they make up most of the matter and energy content of the known universe. Accordingly, the subject matter is quite naturally tied to other fields |

such as astroparticle physics, quantum physics and general relativity. This extensive volume, an outgrowth of a topical and tutorial summer school, has been set up with the aim of constituting an advanced-level, multi-authored textbook which meets the needs of both postgraduate students and young researchers in the fields of modern cosmology and astrophysics.
