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| 1. Record Nr.           | UNINA9910465039203321                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Autore                  | Lesgourgues Julien                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Titolo                  | Neutrino cosmology // Julien Lesgourgues [and three others]<br>[[electronic resource]]                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Pubbl/distr/stampa      | Cambridge : , : Cambridge University Press, , 2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| ISBN                    | 1-107-23497-2<br>1-139-01287-8<br>1-139-60869-X<br>1-139-61214-X<br>1-139-61586-6<br>1-299-25767-4<br>1-139-62516-0<br>1-139-62144-0                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Descrizione fisica      | 1 online resource (xii, 378 pages) : digital, PDF file(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Disciplina              | 539.7/215                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Soggetti                | Neutrinos<br>Neutrino astrophysics<br>Cosmology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Lingua di pubblicazione | Inglese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Formato                 | Materiale a stampa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Livello bibliografico   | Monografia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Note generali           | Title from publisher's bibliographic system (viewed on 05 Oct 2015).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Nota di bibliografia    | Includes bibliographical references and index.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Nota di contenuto       | Machine generated contents note: Preface; 1. The basics of neutrino physics; 2. Overview of the standard cosmological model; 3. Neutrino in the early ages; 4. Neutrinos in the MeV age; 5. Neutrinos in the CMB epoch; 6. The recent times: neutrinos and structure formation; 7. Cosmological neutrinos today; Index.                                                                                                                                                                                                                                           |
| Sommario/riassunto      | The role that neutrinos have played in the evolution of the Universe is the focus of one of the most fascinating research areas that has stemmed from the interplay between cosmology, astrophysics and particle physics. In this self-contained book, the authors bring together all aspects of the role of neutrinos in cosmology, spanning from leptogenesis to primordial nucleosynthesis, their role in CMB and structure formation, to the problem of their direct detection. The book starts by guiding the reader through aspects of fundamental neutrino |

physics, such as the standard cosmological model and the statistical mechanics in the expanding Universe, before discussing the history of neutrinos in chronological order from the very early stages until today. This timely book will interest graduate students and researchers in astrophysics, cosmology and particle physics, who work with either a theoretical or experimental focus.

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