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| Autore | Bertolotti Mario |
| Titolo | Celestial messengers : cosmic rays : the story of a scientific adventure / / Mario Bertolotti |
| Pubbl/distr/stampa | Heidelberg, : Springer, 2013 |
| ISBN | 3-642-28371-3 |
| Edizione | [1st ed. 2013.] |
| Descrizione fisica | 1 online resource (336 p.) |
| Collana | Astronomers' universe, , 1614-659X |
| Disciplina | 535 |
| Soggetti | Cosmic rays |
| 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 indexes. |
| Nota di contenuto | Prehistory - The electron, the proton and X-rays -- Prehistory - Radioactivity -- Cosmic rays - The antefacts -- The discovery - Victor F. Hess and the balloon flights -- The confirmation - Robert Millikan and the "birth cry" of the borning atoms -- A turning point - Things are not as they look -- The earth magnetic field and the geomagnetic effects -- The positive electron -- The electromagnetic showers -- The muon -- The discovery of the -meson, nuclear emulsions and the first "strange" particles -- The extended showers -- Nuclear stars -- The neutrino: elusive and capricious particles able to come from very far away -- What are the primary cosmic rays? -- The origin of cosmic rays -- X- and gamma rays from space. |
| Sommario/riassunto | The book describes from a historical point of view how cosmic rays were discovered. The book describes the research in cosmic rays. The main focus is on how the knowledge was gained, describing the main experiments and the conclusions drawn. Biographical sketches of main researchers are provided. Cosmic rays have an official date of discovery which is linked to the famous balloon flights of the Austrian physicist Hess in 1912. The year 2012 can therefore be considered the centenary of the discovery. |