1. Record Nr. UNINA9910453322103321 Autore Moffat John W Titolo Cracking the particle code of the universe: the hunt for the Higgs boson / / John W. Moffat Pubbl/distr/stampa Oxford:,: Oxford University Press,, [2014] ©2014 **ISBN** 0-19-991553-9 Descrizione fisica 1 online resource (257 p.) Disciplina 539.7/21 Soggetti Higgs bosons Particles (Nuclear physics) Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Prelude: CERN, April 2008 -- What is everything made of? -- Detecting subatomic particles -- Group theory and gauge invariance -- Looking for something new at the LHC -- The Higgs particle/field and weak interactions -- Data that go bump in the night -- Trying to identify the 125 GeV bump -- Electroweak gauge theories -- The discovery of a new boson: is it the Higgs or not? -- Do we live in a naturally tuned universe? -- The last word until 2016 -- Glossary. Sommario/riassunto Among the current books that celebrate the discovery of the Higgs boson, Cracking the Particle Code of the Universe is a rare objective treatment of the subject. The book is an insider's behind-the-scenes look at the arcane, fascinating world of theoretical and experimental particle physics leading up to the recent discovery of a new boson. If the new boson is indeed the Higgs particle, its discovery represents an

Higgs boson, John Moffat argues that the

important milestone in the history of particle physics. However, despite the pressure to award Nobel Prizes to physicists associated with the