Record Nr. UNISA996217321403316 The Cambridge companion to Newton / / edited by I. Bernard Cohen **Titolo** and George E. Smith [[electronic resource]] Pubbl/distr/stampa Cambridge:,: Cambridge University Press,, 2002 **ISBN** 1-139-81604-7 0-511-99860-0 1-280-42060-X 9786610420605 0-511-17640-6 0-511-04047-4 0-511-15722-3 0-511-32554-1 0-511-04810-6 Descrizione fisica 1 online resource (xiv, 500 pages) : digital, PDF file(s) Collana Cambridge companions to philosophy 530/.092 Disciplina Physics - Europe - History - 17th century Soggetti Physics - Europe - History - 18th century Science - Europe - History - 17th century Science - Europe - History - 18th century Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 09 Nov 2015). Note generali Nota di bibliografia Includes bibliographical references (p. 465-480) and index. Nota di contenuto Newton's philosophical analysis of space and time / Robert Disalle --Newton's concepts of force and mass, with notes on the Laws of Motion / I. Bernard Cohen -- Curvature in Newton's dynamics / J. Bruce Brackenridge and Michael Nauenberg -- Methodology of the Principia / George E. Smith -- Newton's argument for universal gravitation / William Harper -- Newton and celestial mechanics / Curtis Wilson --Newton's optics and atomism / Alan E. Shapiro -- Newton's metaphysics / Howard Stein -- Analysis and synthesis in Newton's mathematical work / Niccolo Guicciardini -- Newton, active powers, and the mechanical philosophy / Alan Gabbey -- Background to Newton's chymistry / William Newman -- Newton's alchemy / Karin

Figala -- Newton on prophecy and the Apocalypse / Maurizio Mamiani -- Newton and eighteenth-century Christianity / Scott Mandelbrote -- Newton versus Leibniz : from geomentry to metaphysics / A. Rupert Hall -- Newton and the Leibniz-Clarke correspondence / Domenico Bertoloni Meli.

## Sommario/riassunto

Sir Isaac Newton (1642-1727) was one of the greatest scientists of all time, a thinker of extraordinary range and creativity who has left enduring legacies in mathematics and the natural sciences. In this volume a team of distinguished contributors examine all the main aspects of Newton's thought, including not only his approach to space, time, mechanics, and universal gravity in his Principia, his research in optics, and his contributions to mathematics, but also his more clandestine investigations into alchemy, theology, and prophecy, which have sometimes been overshadowed by his mathematical and scientific interests.