1. Record Nr. UNINA9910811791503321 Autore Grant Edward <1926-> Titolo A history of natural philosophy: from the ancient world to the nineteenth century / / Edward Grant New York,: Cambridge University Press, 2007 Pubbl/distr/stampa 1-107-17127-X **ISBN** 1-280-95925-8 9786610959259 0-511-99987-9 0-511-29607-X 0-511-29530-8 0-511-29370-4 0-511-57353-7 0-511-29450-6 Edizione [1st ed.] Descrizione fisica 1 online resource (xiv, 361 pages) : digital, PDF file(s) Disciplina 509 Soggetti Physics - History Science - History Inglese Lingua di pubblicazione **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Nota di bibliografia Includes bibliographical references (p. 331-345) and index. Nota di contenuto Ancient Egypt to Plato. The preliterate beginnings; Ancient Egypt and Mesopotamia: Early Greek natural philosophy and medicine: Plato --Aristotle (384-322 BC). Life; Works: Aristotle's writings and their preservation; Aristotle's achievements; Aristotle's cosmos and natural philosophy; The scope of Aristotle's natural philosophy -- Late antiquity. Neoplatonism and its approach to Aristotle -- Islam and the eastward shift of Aristotelian natural philosophy. The translations; The fate of natural philosophy in Islam -- Natural philosophy before the

Latin translations. Roman authors; The Latin encyclopedists: European learning to the ninth century; The twelfth century and its immediate

antecedents; Hostile reception of the new theology; Natural philosophy in the twelfth century -- Translations in the twelfth and thirteenth centuries; The world of the translators; Translations from

Arabic and Greek in the twelfth and thirteenth centuries; How trustworthy are Aristotle's translated texts? : Pseudo-Aristotle : works falsely attributed to Aristotle -- Natural philosophy after the translations: its role and place in the late Middle Ages. The medieval university; The impact of Aristotelian natural philosophy in the early thirteenth century to 1240; University lectures on natural philosophy; The classification of the sciences and the subject of natural philosophy ; Anonymous fourteenth-century treatise on natural philosophy; The occult sciences and natural philosophy -- The form and content of late medieval natural philosophy. John Buridan: On the possibility of other worlds: The substantive nature of natural philosophy in the late Middle Ages: Thought experiments and the role of the imagination: Beyond Aristotle; Was Aristotelian natural philosophy science? -- The relations between natural philosophy and theology. The disciplinary relations between natural philosophy and theology; Did God and theology play an integral role in medieval natural philosophy? : How a few significant natural philosophers viewed the relationship as reflected in the questions and commentaries on the works of Aristotle; Did natural philosophy influence medieval theology? -- The transformation of medieval natural philosophy from the early modern period to the end of the nineteenth century. The fate of medieval natural philosophy during the sixteenth and seventeenth centuries; The new natural philosophy of the seventeenth century; The relations between natural philosophy and science in the seventeenth and nineteenth centuries; The revolution in natural philosophy from the Middle Ages to the nineteenth century; The continuity of history and the problem of names and terminology.

Sommario/riassunto

Natural philosophy encompassed all natural phenomena of the physical world. It sought to discover the physical causes of all natural effects and was little concerned with mathematics. By contrast, the exact mathematical sciences were narrowly confined to various computations that did not involve physical causes, functioning totally independently of natural philosophy. Although this began slowly to change in the late Middle Ages, a much more thoroughgoing union of natural philosophy and mathematics occurred in the seventeenth century and thereby made the Scientific Revolution possible. The title of Isaac Newton's great work, The Mathematical Principles of Natural Philosophy, perfectly reflects the new relationship. Natural philosophy became the 'Great Mother of the Sciences', which by the nineteenth century had nourished the manifold chemical, physical, and biological sciences to maturity, thus enabling them to leave the 'Great Mother' and emerge as the multiplicity of independent sciences we know today.