1. Record Nr. UNINA9910797520703321 Autore Heilbron J. L. Titolo Physics: a short history from quintessence to quarks // J.L. Heilbron New York, NY:,: Oxford University Press,, 2015 Pubbl/distr/stampa **ISBN** 0-19-106373-8 0-19-106372-X Descrizione fisica 1 online resource (246 p.) 530/.09 Disciplina Soggetti **Physics** Quarks 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 index. Nota di contenuto The Greek way -- Invention in antiquity. Physica; Applications; Dumbing down -- Selection in Islam. Falsafa; Mixed mathematics; Departures -- Domestication in Europe. At the interface; Alma mater; Fresh imports -- A second creation. Revolution or integration? : The invention of physics; Institutional frameworks; Physics and enlightenment -- Classical physics and its cure. Standard models; Physicists as librarians: Woes and wonders in 1900: The profession --From Old World to new. Legacies of World War I; The legacy enriched; Other interwar business; Americanization -- The quintessential. Sommario/riassunto "How does the physics we know today-- a highly professionalized enterprise, inextricably linked to government and industry-- link back to its origins as a liberal art in ancient Greece? What is the path that leads from the old philosophy of nature and its concern with humankind's place in the universe to modern massive international projects that hunt down fundamental particles and industrial laboratories that manufacture marvels? John Heilbron's fascinating history of physics introduces us to Islamic astronomers and mathematicians, calculating the size of the earth whilst their caliphs conquered much of it; to medieval scholar-theologians investigating

light; to Galileo, Copernicus, Kepler, and Newton, measuring, and trying to explain, the universe. We visit the 'House of Wisdom' in 9th-

century Baghdad; Europe's first universities; the courts of the

Renaissance; the Scientific Revolution and the academies of the 18th century; the increasingly specialized world of 20th and 21st century science. Highlighting the shifting relationship between physics, philosophy, mathematics, and technology-- and the implications for humankind's self-understanding-- Heilbron explores the changing place and purpose of physics in the cultures and societies that have nurtured it over the centuries"--