Record Nr. UNINA9910782563803321 Autore Macdougall J. D. <1944-> Titolo Nature's clocks [[electronic resource]]: how scientists measure the age of almost everything / / Doug Macdougall Berkeley, : University of California Press, c2008 Pubbl/distr/stampa **ISBN** 1-281-75262-2 1-4356-8473-7 9786611752620 0-520-93344-3 Descrizione fisica 1 online resource (285 p.) Disciplina 551.7/01 Soggetti Geochronometry Geological time Radioisotopes in geology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Description based upon print version of record. Includes bibliographical references (p. 257-263) and index. Nota di bibliografia Nota di contenuto No vestige of a beginning-- -- Mysterious rays -- Wild Bill's quest --Changing perceptions -- Getting the lead out -- Dating the boundaries -- Clocking evolution -- Ghostly forests and Mediterranean volcanoes -- More and more from less and less. "Radioactivity is like a clock that never needs adjusting," writes Doug Sommario/riassunto Macdougall. "It would be hard to design a more reliable timekeeper." In Nature's Clocks, Macdougall tells how scientists who were seeking to understand the past arrived at the ingenious techniques they now use to determine the age of objects and organisms. By examining

radiocarbon (C-14) dating-the best known of these methods-and

several other techniques that geologists use to decode the distant past, Macdougall unwraps the last century's advances, explaining how they reveal the age of our fossil ancestors such as "Lucy," the timing of the dinosaurs' extinction, and the precise ages of tiny mineral grains that date from the beginning of the earth's history. In lively and accessible prose, he describes how the science of geochronology has developed and flourished. Relating these advances through the stories of the scientists themselves-James Hutton, William Smith, Arthur Holmes,

Ernest Rutherford, Willard Libby, and Clair Patterson-Macdougall shows how they used ingenuity and inspiration to construct one of modern science's most significant accomplishments: a timescale for the earth's evolution and human prehistory.