

1. Record Nr.	UNINA9910453253203321
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Titolo	Intelligible Design [[electronic resource]] : A Realistic Approach to the Philosophy and History of Science
Pubbl/distr/stampa	Singapore, : World Scientific Publishing Company, 2013
ISBN	981-4447-61-7
Descrizione fisica	1 online resource (296 p.)
Altri autori (Persone)	CarreiraManuel M
Disciplina	501 509
Soggetti	Cosmology Human evolution Life -- Origin Science -- History Science -- Philosophy Science - Philosophy Science - History Cosmology - Origin Life Religion and science Science - history Biological Evolution Origin of Life Philosophy Religion and Science Physical Sciences & Mathematics Sciences - General Electronic books.
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.
Nota di contenuto	Contents; Contributors/Editors; Foreword; Part I. Modern Science in Historical Perspective; 1. On the Origins of Modern Science Julio A. Gonzalo; How did Christian belief provide a "cultural matrix" for the

growth of science?; References; 2. The Post-Renaissance Revolution: The New Science Manuel M. Carreira; Mythological and religious models; Scientific-formal-geometrical models; Models based on scientific causality; (a) Mechanical model; (b) A dual model: physical and geometric (Relativity) and quantum mechanical; The subject and limits of science; TIMELINE: SEVEN CENTURIES

Mathematical symbolsReferences; 3. Frank Sherwood Taylor: The Man Who was Converted by Galileo John Beaumont; The Background; The Early Religious View; Galileo Comes on the Scene; Another Argument; Frank Sherwood Taylor 's Positive Apologetics; Defending the Catholic Faith; Conclusion; References; 4. The Limits of Science Manuel Alfonseca; The limits of mathematics; The limits of physics; The limits of biology; The limits of technology; References; 5. On the Intelligibility of Quantum Mechanics Julio A. Gonzalo; Before quantum mechanics; Blackbody radiation and Planck 's constant

Waves and particlesHeisenberg 's uncertainty principle; Concluding remarks; References; 6. Uncertainty, Incompleteness, Chance, and Design Fernando Sols; Introduction; Practical indeterminacy in classical physics: Newton and Poincare; Intrinsic indeterminacy in quantum physics: Heisenberg; Uncertainty vs. Indeterminacy; What or who determines the future?; Godel's theorems; Randomness; Popper's falsifiability criterion; Chance in the interpretation of evolution biology; Design and chance lie outside the scope of the scientific method; References

7. A Finite, Open and Contingent Universe Julio A. GonzaloLetter to Physics Today; Concluding remark; References; Part II. On the Origin and Development of Life; 8. A Brief History of Evolutionary Thought Thomas B. Fowler and Daniel Kuebler; I. Ancient speculation (to 1650); Ancient Greeks; Early Evolutionary Speculation; II. The Emergence of Modern Science (1650-1800); Early Fossil Discoverers: Extinct Species and the Implied Change in Nature; Species Change; Functionalism vs. Formalism; Lamarckian Inheritable Change; Paley and Design; III. Laying the Foundations (1804 -1859)

Lyell , Malthus and BlytheIV. Darwin 's triumphal entry and early battles over evolution (1859-1910); Darwin 's Critics; Darwin and Heredity; Continuity Or Discontinuity?; V. Genetics and The "New Synthesis" Period: 1910-1960; Population Genetics; The "New Synthesis"; Dissidents; VI. Modern Battles Over Evolution: 1960-present; References; 9. Life's Intelligible Design Manuel Alfonseca; The scientific theory of evolution; Research on Artificial Life; How can God act in the world?; What is life?; What is man?; References

10. What are the Contributions of Genetics to the Understanding of Life? Nicolas Jouve

Sommario/riassunto

This book provides realistic answers to hotly debated scientific topics: Science is about quantitative aspects of natural realities (physical, chemical, biological) but it is the result of human intellectual inquiry and therefore not "per se" materialistic. This book, with contributions from experts in physics, cosmology, mathematics, engineering, biology and genetics, covers timely and relevant topics such as the origin of the universe, the origin of life on Earth, the origin of man (intelligent life) and the origin of science.
