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Nota di contenuto	Preface to the Second Edition -- Preface to the First Edition -- Part 1: The Widening World View -- When Science Was Born -- Science in Athens -- Planetary Spheres and the Size of the Universe -- Medieval Cosmology -- The Roots of the Copernican Revolution -- The True Laws of Planetary Motion Revealed -- Galileo Galilei and His Successors -- How Far Away Are the Stars? -- The Scale of the Solar System -- Part 2: Physical Laws of Nature -- Newton -- Celestial Mechanics -- Nature of Light -- Electricity and Magnetism -- Time and Space -- Curved Space and Gravity -- Atoms and Nuclei -- Strange Microworld -- Elementary Particles -- Part 3: The Universe -- Stars: Cosmic Fusion Reactors -- The Riddle of the Milky Way -- Entering the Galaxy Universe -- Large-scale Structure of the Universe -- Finite or Infinite

Universe: Cosmological Models -- When it all Began: Big Bang -- The Dark Side of the Universe -- Active Galaxies: Messages Through Radio Waves -- Origin of Galaxies -- Part 4: Life in the Universe -- The Nature of Life -- The Origin of Earth and its Moon -- Emergence and Evolution of Life -- Life and our Solar System -- Extrasolar Planetary Systems and Life in other Solar Systems -- Human's Role in the Universe -- Recommended Reading -- Index.

Sommario/riassunto

Regarding his discoveries, Sir Isaac Newton famously said, "If I have seen further it is by standing upon the shoulders of giants." The *Evolving Universe and the Origin of Life* describes, complete with fascinating biographical details of the thinkers involved, a history of the universe as interpreted by the expanding body of knowledge of humankind. From subatomic particles to the protein chains that form life, and expanding in scale to the entire universe, this book covers the science that explains how we came to be. This book contains a great breadth of knowledge, from astronomy and physics to chemistry and biology. The second edition brings this story up to date, chronicling scientific achievements in recent years in such fields of research as cosmology, the large-scale architecture of the universe, black holes, exoplanets, and the search for extraterrestrial life. With over 250 figures, this is a non-technical, easy-to-read textbook at an introductory college level that is ideal for anyone interested in science as well as its history.
