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Titolo	Calculating the cosmos : how mathematics unveils the universe // Ian Stewart
Pubbl/distr/stampa	New York : , : Basic Books, , [2016] ©2016
ISBN	1-5416-9770-7
Descrizione fisica	1 online resource (346 pages, 8 unnumbered pages of plates) : illustrations
Disciplina	523.10151
Soggetti	Astronomy - Mathematics Cosmology - Mathematics Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Prologue -- Attraction at a distance -- Collapse of the solar nebula -- Inconstant Moon -- The clockwork cosmos -- Celestial police -- The planet that swallowed its children -- Cosimo's stars -- Off on a comet -- Chaos in the cosmos -- The interplanetary superhighway -- Great balls of fire -- Great sky river -- Alien worlds -- Dark stars -- Skeins and voids -- The cosmic egg -- The big blow-up -- The dark side -- Outside the universe -- Epilogue.
Sommario/riassunto	"In Calculating the Cosmos, Ian Stewart presents an exhilarating guide to the cosmos, from our solar system to the entire universe. He describes the architecture of space and time, dark matter and dark energy, how galaxies form, why stars implode, how everything began, and how it's all going to end. He considers parallel universes, the fine-tuning of the cosmos for life, what forms extraterrestrial life might take, and the likelihood of life on Earth being snuffed out by an asteroid. Beginning with the Babylonian integration of mathematics into the study of astronomy and cosmology, Stewart traces the evolution of our understanding of the cosmos: How Kepler's laws of planetary motion led Newton to formulate his theory of gravity. How, two centuries later, tiny irregularities in the motion of Mars inspired Einstein to devise his general theory of relativity. How, eighty years

ago, the discovery that the universe is expanding led to the development of the Big Bang theory of its origins. How single-point origin and expansion led cosmologists to theorize new components of the universe, such as inflation, dark matter, and dark energy. But does inflation explain the structure of today's universe? Does dark matter actually exist? Could a scientific revolution that will challenge the long-held scientific orthodoxy and once again transform our understanding of the universe be on the way? In an exciting and engaging style, Calculating the Cosmos is a mathematical quest through the intricate realms of astronomy and cosmology."--

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