1. Record Nr. UNINA9910779579103321 Autore Saraceno Paolo Titolo Beyond the stars [[electronic resource]]: our origins and the search for life in the universe / / Paolo Saraceno; translated by David Goodstein Singapore; ; Hackensack, NJ, : World Scientific, c2012 Pubbl/distr/stampa 981-4295-55-8 **ISBN** 1-299-13307-X Descrizione fisica 1 online resource (388 p.) Altri autori (Persone) GoodsteinDavid L. <1939-> Disciplina 523.1 Soggetti Cosmology Life on other planets Life - Origin Molecular evolution **Evolution (Biology)** Earth (Planet) History Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Preface; Acknowledgements; Contents; Part I Origins; Chapter 1 Our Nota di contenuto Origins; 1.1 The Ancient Questions; 1.2 You Can't Answer Everything; 1.3 The Importance of Doubt; 1.4 Are Science and Religion Compatible?; 1.5 Life in the Universe; Chapter 2 The Beginning of Everything; 2.1 The Big Bang; 2.2 Olbers' Paradox; 2.3 Hubble's Constant; 2.4 The Expanding Universe; 2.5 Background Radiation; 2.6 The Inflated Universe; 2.7 The Horizon of "Our" Universe; 2.8 The Image of the Most Distant Source; 2.9 Dark Matter and Energy; 2.10 After the Big Bang; 2.11 Before the Big Bang Chapter 3 Origins of Stars and Planets3.1 The Stars and the Planets; 3.2 The Placental Cloud; 3.3 From the Cloud to the Star; 3.4 The Giant Molecular Clouds; 3.5 Populations of Stars; 3.6 Disks; 3.7 Outflows; 3.8 The Planets; 3.9 The Discovery of the First Planets; 3.10 Timescales;

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## Sommario/riassunto

What is the origin of the universe? Are we alone in the Universe? Using clear and plain language, the author explores these two interesting scientific-philosophical themes with a broad range of studies, including astronomy, cosmology, chemistry, biology, geology and planet science. The first part discusses the origins of everything, from the Big Bang to humankind. It follows the long course of evolution - from original matter to the formation of more complex structures, from the furthest galaxies to the nearest stars, from planets to organic molecules, from the first and most elementary forms o