1. Record Nr. UNINA9910157472803321

Autore	Beech Martin
Titolo	The Pillars of Creation : Giant Molecular Clouds, Star Formation, and Cosmic Recycling / / by Martin Beech
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-48775-2
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XII, 272 p. 125 illus., 109 illus. in color.)
Collana	Popular Astronomy, , 2626-8760
Disciplina	520
Soggetti	Astronomy Cosmology Organic chemistry Astrobiology Popular Science in Astronomy Organic Chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Preface -- Chapter 1- Reading the Sky -- Chapter 2 - In the Eye of the Beholder -- Chapter 3: The Dark Clouds Revealed -- Chapter 4 – The Hyperfine Split and Atomic Jitters -- Chapter 5 – In the Grip of Gravity -- Chapter 6 - It's a Far Flung Life -- Appendix - Notes and References -- Index.
Sommario/riassunto	This book explores the mechanics of star formation, the process by which matter pulls together and creates new structures. Written for science enthusiasts, the author presents an accessible explanation of how stars are born from the interstellar medium and giant molecular clouds. Stars produce the chemicals that lead to life, and it is they that have enabled the conditions for planets to form and life to emerge. Although the Big Bang provided the spark of initiation, the primordial universe that it sired was born hopelessly sterile. It is only through the continued recycling of the interstellar medium, star formation, and stellar evolution that the universe has been animated beyond a chaotic mess of elementary atomic particles, radiation, dark matter, dark

energy, and expanding spacetime. Using the Milky Way and the Eagle Nebula in particular as case studies, Beech follows every step of this amazing process. .