

Stardust: Supernovae and Life-- the Cosmic Connection; John Gribbin, Mary Gribbin; 238 pages; 9780300090970; 2001; Yale University Press, 2001

Preview of Stardust by John Gribbin. Stardust: Supernovae and Life -- The Cosmic Connection. by. John Gribbin. Yet to have a cosmos that is long-lasting and can build complex structures like galaxies, planetary systems and people turns out to require just the right numbers -- whether we are looking at the amount of stuff it contains, the force that holds atomic nuclei together or the smoothness of the early universe. Supernovae explosions also provide the energy needed to synthesize elements heavier than iron. The scattering of fine dusty particles (stardust) provides the site where chemical interactions can occur as well as the seeds for a complex interstellar chemistry. Spectroscopic studies have more recently revealed the existence of organic, polyatomic molecules as part of the interstellar chemistry -- our Galaxy is seeded with the ingredients for life. The appendix offers a short review of theoretical physicist Lee Smolin's principle of cosmological natural selection (an alternative to versions Find many great new & used options and get the best deals for Stardust : Supernovae and Life - The Cosmic Connection by Mary Gribbin and John Gribbin (2001, Trade Paperback) at the best online prices at eBay! Free shipping for many products! We are made of stardust--and so is all life as we know it. All the chemical elements on earth except hydrogen--including the ones in our bodies--have been processed inside stars, scattered across the universe in great stellar explosions, and recycled to become new stars, planets, and parts of us. In this engrossing book, John and Mary Gribbin relate the developments in twentieth-century astronomy that have led to this shattering realization. Supernovae explosions also provide the energy needed to synthesize elements heavier than iron. The scattering of fine dusty particles (stardust) provides the site where chemical interactions can occur as well as the seeds for a complex interstellar chemistry. Spectroscopic studies have more recently revealed the existence of organic, polyatomic molecules as part of the interstellar chemistry -- our Galaxy is seeded with the ingredients for life. The appendix offers a short review of theoretical physicist Lee Smolin's principle of cosmological natural selection (an alternative to versions Request PDF | On Jan 1, 2000, John R. Gribbin and others published Stardust : supernovae and life-- the cosmic connection | Find, read and cite all the research you need on ResearchGate. [Show full abstract] polynomials of certain graphs providing a new way to compute them. We also discuss connections with the Gel'fand-MacPherson correspondence. View full-text. Article.