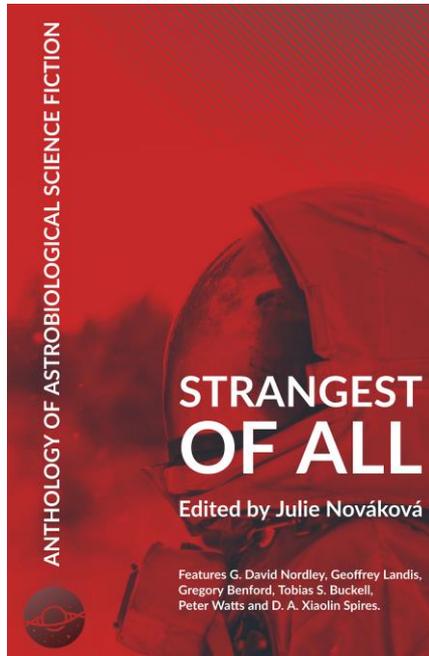


The European Astrobiology Institute presents
Strangest of All,
an anthology of astrobiological science fiction



Oceans under ice and civilizations that have never seen the sun. Life in the most unexpected of places. Biospheres radically different from ours.

Strangest of All, developed in cooperation of the European Astrobiology Institute and scientist and editor [Julie Nováková](#), is an anthology of astrobiology-themed science fiction stories aimed to both entertain and educate. It takes you on a journey to encounter life in the universe, as imagined in SF stories by award-winning authors, and our chances of finding it outside of the Earth, detecting it remotely, learning its limits and more in original nonfiction essays following each story.

The book contains reprint SF stories by G. David Nordley, Geoffrey Landis, Gregory Benford, Tobias S. Buckell, Peter Watts and D. A. Xiaolin Spires, and a bonus story by the editor.

Among fostering interdisciplinary and international research in astrobiology and bringing together scientists, industry and the general public, the EAI aims to educate and to present the exciting and relevant field of astrobiology. One of the ways to introduce astrobiology to people of various ages, backgrounds, nations or interests is through popular fiction. Science fiction has long served as means to showcase new ideas, has always been inspired by science and vice versa. That's why we developed a project team "Science Fiction as a tool for Astrobiology Outreach and Education", whose first major project is the educational and outreach astrobiological SF anthology *Strangest of All*. It contains stories from world-renowned authors, most of whom also have a scientific or engineering background, and each of the stories is accompanied by a nonfiction piece centered on the astrobiological topics from the story.

With its vast science-inspired imagination, science fiction may be the perfect tool to present the full breathtaking scale of astrobiology. After all, from the possibility of microbial life on Mars and elsewhere in the solar system across the multitude of exoplanets all the way to the Fermi Paradox, astrobiology tries to find the answer to the age-old question whether other life exists in the universe, and more – like how life originated here on Earth, what are its physical limits, when could it first arise and what forms might life take under different conditions. Through these questions, it encompasses all from the Big Bang to the heat death of the universe.

To introduce this amazing journey to readers all over the world, an idea was conceived: to create an anthology of astrobiological science fiction by world-renowned authors, followed by essays about the involved science. An anthology that would be freely available to anyone in multiple e-book formats and include tips for classroom use. *Strangest of All* is the result, and it's hopefully the first and not the last of such projects. We hope you find it entertaining as well as illuminating.

Do you have a passion for science, outreach/education and science fiction and would like to be involved in similar projects? Get in touch with the editor at julie.novakova@gmail.com.

About the stories

Nordley's "War, Ice, Egg, Universe" takes readers to an aquatic civilization inhabiting a Europa-like world with an ice-covered ocean, and the accompanying essay focuses on what we know about conditions for life on Europa, Enceladus, Ganymede and other ocean worlds. In "Into The Blue Abyss" by Landis, the protagonist dives into an entirely different ocean - the high-pressure liquid water layer on Uranus, where chemistry signifying possible life had been observed. Could life really exist in such conditions - and could high-pressure environments actually be one of the most common habitats in the universe?

Continuing the journey outward of the Sun, "Backscatter" by Benford finds life in an improbable place: an icy asteroid in the Kuiper Belt. The follow-up essay provides background on the possibility of life in asteroids and comets, and dives into the topic of exotic silicon-based life in such cold places with no liquid water.

In Buckell's "A Jar of Goodwill", we leave solar system and environments similar to it entirely, visiting a strange exoplanet where plants metabolize chlorine - but the main problem the hero faces is whether its ant-like inhabitants are intelligent creatures. Halogen-based photosynthesis was actually proposed in theory - so we can look at where we could expect such exotic life. Even more exotic is the titular creature in Watts' novelette "The Island": a live Dyson sphere. In the essay, we look at how we can search for Dyson spheres, what the surveys yielded up-to-date, and whether we could presume anything about the origin and thought processes of a nigh-impossible being like the Island.

Benford returns with a microstory "SETI for Profit", an interesting take on how to revive interest in SETI. What efforts to listen to potential extra-terrestrial messages have been taken so far, and what can we expect in the future? The topic of SETI is inextricably linked with the Fermi Paradox, one of the themes of Spires' "But, Still, I Smile". How can we explain the paradox with what we know so far, and how does the explanation in the story relate to our world? Finally, in the bonus story by Nováková, "Martian Fever", we look at Mars exploration gone awry - and the risks of interplanetary biological contamination and the question of planetary protection.

Each story is followed not only by the science essay complete with references for readers craving more, but also a couple of ideas for classroom discussions or tasks (best-suited for higher high school grades or undergraduate university students), such as thinking of how to devise a message for a potentially listening alien civilization, bearing in mind what we know of sensory and cognitive differences between species here on Earth. For most of the questions, there is no definitive answer - but all the more curiosity should they elicit.