Astrobiology

Astrobiologie

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Vol 1: Introduction / Úvod

Defining Astrobiology

Astrobiology as a concept and field of study has its origins with the advent of space exploration and later the discovery of exoplanets. Early astrobiology research focused on the search for extraterrestrial life and the study of the potential for life to exist on other planets. In the 1960s and 1970s, NASA began its astrobiology pursuits within the Viking program, which was the first US mission to land on Mars and search for signs of life.

Regarding habitable environments, astrobiology investigates potential locations beyond Earth that could support life, such as Mars, Europa, and exoplanets, through research into the extremophiles populating austere and extreme environments on Earth, like volcanic and deep sea environments.

Astrobiology also concerns the study of the origin and early evolution of life on Earth to try to understand the conditions that are necessary for life to form on other planets. This research seeks to understand how life emerged from non-living matter and how it evolved to become the diverse array of organisms we see today. Research within this topic is conducted utilising methods from paleosciences (sciences studying ancient Earth). *Adapted from Wikipedia*

How would our understanding change were we to find life in other places than our Earth?

Vocabulary

- advent (ˈædvent) - příchod, nástup, objevení se
- exoplanet (ˈeksəʊˌplænɪt) - exoplaneta
- extraterrestrial (ˌekstrətəˈ restriəl) - mimozemský
- habitable (ˈhæbɪtəbl) - obyvatelný
- to investigate (tə ɪnˈvestɪgeɪt) - zkoumat, prozkoumat
- beyond (bɪˈjɒnd) - za, mimo, nad
- austere (ɒˈstɪə) - strohý, prostý, drsný
- to concern (tə kənˈsɜːn) - týkat se, zajímat se
- to emerge (tə ɪˈmɜːdʒ) - objevit se, vzniknout
- diverse (daɪˈvɜːs) - rozmanitý, různorodý
- array (əˈreɪ) - řada, škála, množství
- to conduct (tə kənˈdʌkt) - provádět, vést
- to utilise (tə ˈjuːtəlaɪz) - využít, upotřebit

An Exoplanet - artist's impression

