

Astrobiology and Society

A White Paper on Societal Implications of Astrobiology Research in Europe Today

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The Astrobiology and Society White Paper is a joint work of the WG5 History and Philosophy of Astrobiology of COST Action TD1308. The aim of the White Paper is to address scientific and societal issues, discuss current status and propose a sustainable future of astrobiology research in the European Union.



COST Action Project Origins and Evolution of Life

TD1308 Origins within the European research network COST Action, addresses questions that fascinate and intrigue scientists, and the general public alike, questions that are pivotal to our understanding and appreciation of our place in the universe:

1. Where, when, and how did life emerge and evolve on Earth?
2. What are the conditions under which life can exist?
3. Does life exist elsewhere, and if yes, how can it be detected?
4. What is the future of life in our universe?

Working Group 5: History and Philosophy of Astrobiology

The Working Group 5 of TD1308 Origins Project is active in:

- Research into societal perceptions of astrobiology.
- Assessment and prediction of impact of science;
- Conceptual assessment of novel ethical challenges;
- Science dissemination and communication;
- Engagement in public educational efforts;
- Formation of foundational scientific concepts;
- Social and historical framework of science.



So called Flammarion engraving. The image illustrates the human quests for knowledge. Image credit: Wikipedia

Understanding the origins and evolution of life is not just of interest for astrobiology, but is highly relevant to philosophy, theology, anthropology, and other humanities and social sciences. Astrobiology deals with questions fundamental to human existence and societies, such as:

- Who are we?**
- Where do we come from?**
- What are the origins of life?**
- Are we alone in the universe?**

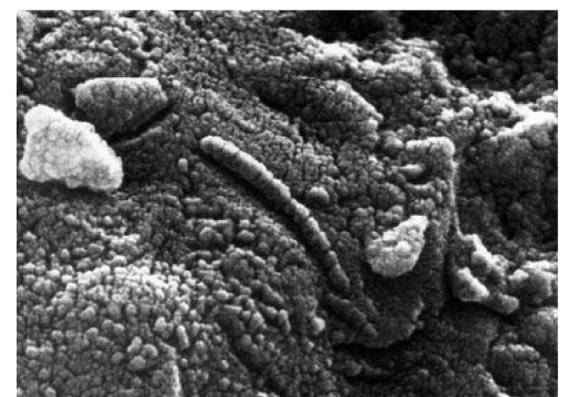
What is humankind's place in the universe?

Given the significance of the questions studied, the works of astrobiology have strong implications for society.

Astrobiology is a discipline that has the potential to change the contemporary worldview in profound ways.

We dwell in a culture where the scientific enterprise can flourish and contribute to the society.

The White Paper aims to assist the scientists, decision makers, and planners with better understanding of how public reacts to science, and with insights into the broader implications of astrobiology research.



ALH84001 meteorite is the subject of a scientific claim that it contains the remains of ancient life. Image credit: Wikipedia



Spectacular image of earthrise seen from the moon. The image that changed our view of the planet. Image credit: NASA

For more please see: TD1308 Life Origins <http://life-origins.com>; Working Group 5 <http://life-origins.com/content/wg5-history-and-philosophy-sciences>; Pufendorf Institute, A Plurality of Lives project: www.pi.lu.se/en/activities/theme-a-plurality-of-lives

The Scope of the White Paper

- Outreach and dissemination;
- Public perceptions of astrobiology;
- Benefits and distribution of the European space programme;
- Education and training;
- Effect of advancements in space sciences on society;
- New themes in space exploration;
- Emergence of space commerce;
- Socio-economic aspects of astrobiology;
- Environmental protection;
- Science ethics;
- Research sustainability;
- The impact of the discovery of life beyond Earth.

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