



DIPARTIMENTO
DI GEOSCIENZE



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Seminario

Astrobiology: from pristine matter to Mars exploration and research

Martedì, 6 marzo 2018 – ore 16:30
Aula Arduino

Relatore: **Prof. Dr. Jesús Martínez-Frías**
Head, CSIC Research Group “Meteorites
and Planetary Geosciences” and Lanzarote
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Abstract:

Earth and planetary geosciences and astrogeological studies are demonstrating to be of great help if not essential in facing the challenging and fascinating questions whether or not Earth's life is unique, and the links between life on Earth and potential for life on other planets. It is well known that the biosphere and geosphere (and geodiversity and biodiversity) are intrinsically linked, probably since life's origin. Habitable environments do not need to contain life. However, any search for life on other planets or moons, requires to understand the origin and geological evolution of the different paleoenvironments, in order to identify the main geomarkers of habitability. Astrobiology is the study of the origin, evolution, distribution, and future of life in the universe. This involves carrying out all diverse studies, considering a multi- and trans-disciplinary approach, at different scales, from microbes to humans, and taking into account also societal and ethical issues. Likewise, the future human exploration and research of other celestial bodies involves a good knowledge of the geology of the asteroidal, lunar and planetary surfaces, as well as developing previous tests on our planet (hence the importance of terrestrial analogues, e.g. Lanzarote and Chinijo islands global UNESCO Geopark). The aim of this seminar is to give a general overview about the main astrobiological subjects from a planetary geology perspective.

Proponente: Matteo Massironi