

PATHWAYS TOWARDS HABITABLE PLANETS II  
Bern (Switzerland), 13 - 17 July 2015

SATELLITE MEETING

Title

**LABORATORY ANALOGUES OF EXOPLANETARY ENVIRONMENTS**

Abstract

The long-term response of living organisms to environmental parameters such as radiation levels, space vacuum, pressure and temperature, as well as different surrounding chemical compositions can be observed both in Earth-like environments and extreme environments simulated in laboratories and on Earth (e.g., hydrothermal vents, polar environment, hot deserts). This workshop aims to focus discussion on laboratory analogues of exoplanetary environments as experimental tools and observing procedures able to identify and recognize biomarkers in planetary atmospheres for present and future space remote observations and in situ explorations. Biological activity on planetary environments is also very important considering their effects on the atmospheres. We define biomarkers as chemicals produced by life forms at the terrestrial limits of life and their extrapolation to extraterrestrial or non-Earth centric conditions. Technological applications and know how are also welcome as improving support to future experiments from space.

Chair

Emanuele Pace (Università di Firenze, Italy)  
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Riccardo Claudi (INAF – Osservatorio Astronomico di Padova, Italy)  
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SOC:

Daniela Billi (Università di Roma Tor Vergata, Italy)  
Giuseppe Piccioni (INAF- IAPS Roma, Italy)  
Annick Wilmotte (University of Liege, Belgium)  
Eva Pokojška (Masaryk University, Czech Republic)  
Joseph Elster (Czech Academy of Science, Czech Republic)  
Guillermo Munoz-Caro (Centro de Astrobiología of Madrid, Spain)  
Areg Mickaelian (Byurakan Astrophysical Observatory, Armenia)

Preliminary program

13 July	14.00-16.30	15' talk (8 talks)
14 July	14.00-16.30	15' talk (8 talks)

15 July 14.00-16.30 Poster session & round table

#### Poster session

Authors wishing to submit poster contributions are warmly invited to submit an abstract. They will be invited to briefly present their work during the last day of the meeting.

#### Conference room

Meeting Room 115 (54 seats)

#### Submission of abstracts

The abstracts can be sent to [pace@arcetri.astro.it](mailto:pace@arcetri.astro.it) and to [riccardo.claudi@oapd.inaf.it](mailto:riccardo.claudi@oapd.inaf.it) before May 11th.

It is a focused session on laboratory analogues aimed at exploring ideas and experiments paving the way for future investigations of exoplanetary atmospheres. The limited number of selected talks will address this topic mainly. Abstracts for posters are very welcome.

A paper that is going to be presented at this parallel session only needs not be submitted to Pathways. However, if an author thinks the paper is relevant to the main conference as well and wants to present it there too, then s/he can submit it to Pathways, but a priori it is a fully independent selection process.

#### Registration and accommodation

All participants to the meeting need to register at Pathways main (through the website). However, you are kindly requested to send an email to the chairman of this parallel session to inform on your intention to attend it.

Hotels will be very busy in Bern during the first half of July, so it is highly recommended to arrange your accommodation well in advance. A number of rooms are pre-booked at various Bern hotels, at preferred rates which vary from 115 CHF to 308 CHF for a single room. An overview of pre-booked hotels, rates and deadlines can be found here :

[http://pathways2015.sciencesconf.org/conference/pathways2015/pages/Hotels\\_Pathway\\_Juli\\_2016.pdf](http://pathways2015.sciencesconf.org/conference/pathways2015/pages/Hotels_Pathway_Juli_2016.pdf)

To book, please contact the hotels directly and refer to the conference. Online booking (e.g. ebookers) do not allow this offered rates.

#### Important dates

11 May	Abstract Deadline
01 June	Selection of contributed talks
13 July	Conference Start

## Venue

The conference will be held in the main building of the University of Bern (Hochschulstrasse 4, 3012 Bern). It is located immediately above the central train station, with access by elevator from the platforms level.