

The XIV International School in Astrobiology will examine how Earth analog environments inform humanity's search for extraterrestrial life. The School will provide an interdisciplinary examination of the chemical, physical and geological properties of potential extraterrestrial habitats and an in-depth description and analysis of sites on Earth with similar characteristics. In particular, lectures and activities will consider icy satellites, rocky planets in the Solar System, extreme Earth environments, and terrestrial exoplanets.

Earth has a wide diversity of environments and while many are hostile to humans and the life we encounter on a daily basis, they are nonetheless habitats for many types of "extreme" forms of life. From brine channels in sea ice to acidic hot springs or the driest deserts, Earth-based life has found a way to grow, thrive and survive. This adaptability inspires astrobiologists to broaden the search for life in the universe to environments previously thought inhospitable. This year's School will explore the diverse environments of Earth that may resemble environments on Mars, Europa and beyond. The intellectual connections the students develop at this School will facilitate interdisciplinary research that brings the groundbreaking discovery of life beyond Earth within our grasp

www.uimp.es

GENERAL INFORMACION

→ **Until June 10th, 2016**

Santander

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From 9:00 a 14:00 h
To 16:00 a 18:00 h (except Fridays)

→ **Scholarship applications**

Until May the 16th, 2016

→ **From June 13th, 2016**

Santander

Palacio de la Magdalena
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Tel. 942 29 88 00 / 942 29 88 10
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From 9:00 a 14:00 h
To 15:30 a 18:00 h (except Fridays)

→ **Enrollment**

From April the 25th, 2016

Transporte oficial



→ Code 62xs | Fee: A | ECTS: 1



UIMP
Universidad Internacional
Menéndez Pelayo

Santander 2016

XIV INTERNATIONAL SCHOOL OF
ASTROBIOLOGY «JOSEP COMAS Y SOLÀ»

Earth analog
environments and the
search for life beyond
the Earth

Rory Barnes
José Miguel Mas Hesse

Santander
June 20-24, 2016

www.uimp.es

NIPC: 041-16-002-1

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CENTRO DE ASTROBIOLOGÍA
ASOCIADO AL NASA ASTROBIOLOGY INSTITUTE
CSIC



XIV INTERNATIONAL SCHOOL OF ASTROBIOLOGY «JOSEP COMAS Y SOLÁ»

Earth analog environments and the search for life beyond the Earth

Directors

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Centro de Astrobiología CSIC- INTA, Spain

Organization

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Centro de Astrobiología CSIC- INTA, Spain

June 20-24, 2016

Monday 20

10:00 h | Welcome Lectures

Rory Barnes

José Miguel Mas Hesse

11:30 h | Hot springs and other astrobiology- relevant sites on Earth

Kathy Campbell

University of Auckland, New Zealand

15:00 h | Europa, Enceladus and other icy worlds

Britney E.Schmidt

Georgia Institute of Technology School of Earth and Atmospheric Sciences, USA

16.30 h | Project assignment and development

Tuesday 21

10:00 h | Río Tinto as a terrestrial Mars analogue

Ricardo Amils

Universidad Autónoma de Madrid, Spain

11:30 h | The geological history of Mars and its habitability: a multifold tale

Gian- Gabriele Ori

International Research School of Planetary Science. Università d Annunzio, Italy

15:00 h | Importance of the dark biosphere for the habitability concept

Ricardo Amils

Wednesday 22

9:00 h | Excursion to Zumaia Flysch

Asier Hilarrio

Geólogo

Thursday 23

10:00 h | Cold seep environments as analog sites for astrobiology

Kathy Campbell

11:30 h | Glacial Earth environments as Europa/ Enceladus analog sites

Britney E.Schmidt

15:00 h | From concepts to practice: Terrestrial Mars analogues for geology, astrobiology, and human exploration

Gian- Gabriele Ori

19:00 h | Open Lecture (in Spanish)

Océanos planetarios, la nueva frontera de la exploración espacial

Olga Prieto Ballesteros

Centro de Astrobiología CSIC- INTA, Spain

Friday 24

10:00 h | Student presentation

11.30 h | Synthesis + diplomas

12:00 h | Adjourn