

[www.uimp.es](http://www.uimp.es)



## INFORMACIÓN GENERAL

→ Hasta el 12 de junio de 2015

### Santander

Campus de Las Llamas  
Avda. de los Castros, 42  
39005 Santander  
Tel. 942 29 87 00 / 942 29 87 10  
Fax 942 29 87 27  
[informacion@sa.uimp.es](mailto:informacion@sa.uimp.es)

### Madrid

C/ Isaac Peral, 23  
28040 Madrid  
Tel. 91 592 06 31 / 91 592 06 33  
Fax 91 592 06 40 / 91 543 08 97  
[alumnos@uimp.es](mailto:alumnos@uimp.es)

### Horario

de 9:00 a 14:00 h  
de 16:00 a 18:00 h (excepto viernes)

→ A partir del 15 de junio de 2015

### Santander

Palacio de la Magdalena  
39005 Santander  
Tel. 942 29 88 00 / 942 29 88 10  
Fax 942 29 88 20

### Horario

de 9:00 a 14:00 h  
de 15:30 a 18:00 h (excepto viernes)



# UIMP

Universidad Internacional  
Menéndez Pelayo

## Santander 2015

**XIII INTERNATIONAL SCHOOL  
OF ASTROBIOLOGY**

**«JOSEP COMAS I SOLÀ»**

**The Origin of Life.**

**From Monomers to Cells**

**Javier Gómez-Elvira**

**Victoria Meadows**

## PLAZOS

→ **Plazo de solicitud de becas**

Hasta el día 18 de mayo, para  
los cursos que comiencen antes  
del 17 de julio de 2015

Hasta el día 15 de junio, para los  
cursos que comiencen a partir  
del día 20 de julio de 2015

→ **Apertura de matrícula**

Desde el 8 de abril de 2015  
(Plazas limitadas)

 @cursosUIMP

 [fb.com/uimp20](https://www.facebook.com/uimp20)

Transporte oficial



→ Código 62HY | Tarifa: A | ECTS: 1

Santander

June 29-July 3, 2015

[www.uimp.es](http://www.uimp.es)

Sponsors



### XIII INTERNATIONAL SCHOOL OF ASTROBIOLOGY

«JOSEP COMAS I SOLÀ»

## The Origin of Life. From Monomers to Cells

#### Dirección

**Javier Gómez-Elvira**

Centro de Astrobiología CSIC-INTA, Spain

**Victoria Meadows**

University of Washington

#### Organization

**Olga Prieto Ballesteros**

Centro de Astrobiología CSIC-INTA, Spain

## June 29-July 3, 2015

### Monday 29

10:00 h | Welcome

**Javier Gómez-Elvira**

**Victoria Meadows**

11:30 h | Meteorites, comets and the origin of life

**George Cody**

Carnegie Institution of Washington

15:30 h | Origin of life: physical, geological and chemical characteristics

**John Baross**

Washington University

16:30 h | Project development and assignment

### Tuesday 30

10:00 h | Prebiotic chemistry on the primitive Earth

**George Cody**

12:00 h | From amphiphile molecules to replicating vesicles

**Pierre-Alain Monnard**

University of Southern Denmark

15:30 h | The evolution of metabolic pathways

**Juli Peretó**

University of Valencia

### Wednesday 1

10:00 h | Origin and evolution of the RNA world

**Pierre-Alain Monnard**

12:00 h | Minimal genomes and the Last Universal Common Ancestor

**Juli Peretó**

15:30 h | SEA OBSERVATION

### Thursday 2

08:00 h | EXCURSION

Visit to Zumaia Flysh: 50 Myears of Earth evolution

17:30 h | PUBLIC LECTURE

En busca de los orígenes de la vida

**Carlos Briones**

Centro de Astrobiología CSIC-INTA, Spain

### Friday 3

10:00 h | Origin of life environments, biochemical and microbial characteristics

**John Baross**

12:00 h | Working groups discussion

13:15 h | Synthesis, diplomas and fairwell

**Javier Gómez-Elvira**

**Victoria Meadows**

The school will provide an interdisciplinary examination of the chemical, physical and geological processes that are required to develop cellular life, and discuss the different environmental settings that would support these processes. Topics covered will include an introductory overview of origin of life research and future directions, planetary environments for life's origin, abiological synthesis of small molecules relevant to life, the synthesis of biopolymers, the RNA world, and the development of protocells and the first cells.