



# BIOGEOSCIENCES-ASTROCAIBARIÉN- 2013

(NOVEMBER 4<sup>TH</sup>-10<sup>TH</sup>)

**PRELIMINARY PROGRAM (PLEASE ALSO CHECK  
[HTTP://BIOGEOSCIENCES.UCLV.EDU.CU](http://biogeosciences.uclv.edu.cu))**

**November 4<sup>th</sup>, 2013**

*[BioGeoSciences-13: Marine and Freshwater Biogeosciences](#)*

## ***Morning***

9:00: Inscription

10: 00: Official Opening (Cardenas, Planetary Science Lab, UCLV, Cuba)

10: 10: [Opening Talk: Mathematical Modelling in Environmental Science \(De Baets, Ghent University, Belgium\)](#)

11:00: A model for pike migration. (Baetens, Ghent University, Belgium)

11:15: Evolution of freshwater ecosystems after perturbations of their optical quality (Lily, Planetary Science Lab, UCLV, Cuba)

11:30: Coffee Break

12:00: Determinación del potencial erosivo de las cuencas hidrográficas y la descarga de sedimentos a la bahía de Cienfuegos en Cuba, utilizando el modelo hidrológico N\_SPECT ( Sánchez, CEAC, Cuba)

12:15: Temporal (two-year) response of benthic macrofauna and sediments to hypoxia in a tropical semi-enclosed bay (Cienfuegos, Cuba). (Díaz-Asencio, CEAC, Cuba)

12:30: Light and photosynthesis in seagrass Meadows (Fadragas, Planetary Science Lab, UCLV, Cuba)

12:45: Variations in open ocean primary productivity due to changes in the photobiological regime (Peñate, Medical University of Santa Clara, Cuba)

13:00: Effect of ultraviolet radiation in the photosynthetic potential in the open oceans (Rodriguez, Planetary Science Lab, UCLV, Cuba)

13:15: Effect of UV radiation in photosynthesis of marine cyanobacteria (Avila, Planetary Science Lab, UCLV, Cuba)

## ***Afternoon***

13:30 Lunch

14:30: Posters

16:00: Beach

## ***Night***

18:30-20:30 Welcome Cocktail

November 5<sup>th</sup>, 2013

BioGeoSciences-13: Atmospheric and Geospheric Biogeosciences

**Morning**

10:00: Was a supernova responsible for the isotopic Carbon-Beryllium anomaly of the VIII century A.D.? (Perez, Planetary Science Lab, UCLV, Cuba)

10:30: Study of the temporal behavior of atmospheric radionuclides combining Gamma Spectrometry and Multivariate Statistical Analysis (Cartas, CEAC, Cuba)

11:00: Cálculo de emisiones a la atmósfera por quema de biomasa, a partir de la teledetección (Carrillo, Instituto de Meteorología, Cuba)

11:30: Coffee Break

12:00: Caracterización de las emisiones de gases de efecto invernadero por incendios forestales en plantaciones y bosques forestales de Cuba (Manso, Instituto de Meteorología, Cuba)

12:30: Climate change effects on fungi: experimental warming and increased nutrient availability induce faster growth and higher spore production (Damialis, Royal Holloway University of London, UK)

**Afternoon**

13:30 Lunch

14:30: Posters

16:00: Beach

**Night**

19:00 Dinner

November 6<sup>th</sup>, 2013

BioGeoSciences-13: Historic-Geologic Journey

**Morning**

10:30: Journey through historic sites in Santa Clara city (includes visit to Che Guevara's Mausoleum)

**Afternoon**

13:30: Lunch at Loma del Capiro geological site

14:30: Journey to Loma del Capiro, where signs of the KT limit and fingerprints of Chicxulub asteroid impact can be seen

**Night**

19:00 Dinner

**November 7<sup>th</sup>, 2013**  
**BioGeoSciences-13: Astrobiology**

***Morning***

10:00: An aquatic habitability index (Cardenas, Planetary Science Lab, Cuba)  
10:30: How do we square the life phenomenon with the laws of Physics? (Horvath, IAG-USP, Brazil)  
11:00: Biological Evolution of Replicator Systems: Towards a Quantitative Approach (Martin, Planetary Science Lab, Cuba)  
11:30: Coffee Break  
12:00: Geoethics in the study of Mars analogs (Martínez-Frias, Geosciences Institute of, UCM, Spain)  
12:30: Biogeochemical fingerprints of life: from polar ecosystems to Galilean Moons (Chela-Flores, ICTP, Italy)  
13:00: [Summary Talk: On the cross-fertilisation between Planetary Science and Environmental Sciences](#) (Horvath, IAG-USP, Brazil)

***Afternoon***

1:30 Lunch  
2:30: Posters of BG-13 and Exhibition of the National Movement of Amateur Astronomers  
4:00: Beach

***Night***

18:30-20:30: Farewell Party of BioGeoSciences-2013

**November 8<sup>th</sup>, 2013**  
**AstroCaibarien-2013: National Astronomy Meeting**

***Morning***

***Afternoon***

Official Opening  
Videos del ICTP (Chela-Flores y Serra):  
1. "Hace 3,800 millones de años".  
2. "La búsqueda de nuestros orígenes en el polvo de las estrellas: Viajes imaginarios en el cosmos y hacia nuestro pasado".

***Night***

Sky Observation near the sea at Caibarien city

**November 9<sup>th</sup>, 2013**  
*AstroCaibarien-2013: National Astronomy Meeting*

***Morning***

Talks of National Astronomy Meeting (deadline to receive abstracts October 20<sup>th</sup>, 2013)

***Afternoon***

Talks of National Astronomy Meeting (deadline to receive abstracts October 20<sup>th</sup>, 2013)

***Night***

20:30: General Assembly of the Astronomers Movement

22:00: Sky observation from the hills of Meteorological Station of Caibarien

**November 10<sup>th</sup>, 2013**  
*AstroCaibarien-2013: National Astronomy Meeting*

***Morning***

Discussion for future collaborations

***Afternoon***

Return Home

***Night***