

PhD position

at the University of Girona

Deadline: 25 august 2016

Requirements: Undergraduate degree (in any area) and Master degree

Approximate salary: 1.150 €month less taxes during 11 months

(this salary is similar to that of the Spanish ministry FPU grants: they pay 1.173 €less taxes/mes)

Begin date: september/october2016 (as soon as the university prepares the contract)

Topic: Complex systems

The person who will get the position must have finished a master degree (60 credits) when the contract begins, but can apply for it while finishing the master.

The person who will get the position will do the PhD thesis at the University of Girona, and will apply to fellowships from the ministry (FPU), the Generalitat and the University of Girona to do the PhD research in a topic he/she likes and that is within the objectives of the group projects.

Our research is based on space-time simulations of the propagation of the Neolithic. These models attempt to understand archaeological, genetic and linguistic data, which are related to the Neolithic transition.

This contract has a duration of 11 months and is founded in its integrity by the SimulPast project:

SimulPast. Simulating the Past to Understand Human Behaviour

This project ends in year 2017 and involves more than 60 researchers: physicists, mathematicians, archaeologists, engineers, geneticists, etc. of 11 research groups in 7 different institutions.

**If you are interested, send your academic records to: joaquin.fort@udg.edu
(please include the qualification and academic course of all undergraduate and master courses)**

Bibliography:

Fort J, **PNAS** **109**, 18669-18673 (2012)

Synthesis between demic and cultural diffusion in the Neolithic transition in Europe

PNAS is an interdisciplinary journal with impact factor surpassed only by Nature y Science

Fort J, Méndez V, **Phys. Rev. Lett.** **82**, 867-870 (1999)

Time-delayed theory of the Neolithic transition in Europe

Paper highlighted by the American Institute of Physics as one of the 4 most important published in January 1999

Fort J, **J. Roy. Soc. Interface**, **12**, 20150116 1-8 (2015)

Demic and cultural diffusion propagated the Neolithic transition across different regions of Europe

Featured by the Spanish edition of Scientific American (*Investigación y Ciencia SciLogs*):

<http://www.investigacionyciencia.es/blogs/matematicas/65/posts/prehistoria-matematica-o-de-cmo-llegamos-al-neolitico-13163>

Isern N, Fort J, **New J. Phys.** **12** 123002 1-9 (2010)

Anisotropic dispersion, space competition and the slowdown of the Neolithic

Highlighted by the Institute of Physics (United Kingdom), Science Daily, the European Commission (CORDIS) and the ministry (SINC)

More information on our research: <http://copernic.udg.es/QuimFort/fort.htm>

Complex Systems Lab (Univ. de Girona): <http://www.udg.edu/grupsrecerca/Sistemescomplexos>