Job Description

Job
National Strategic Reference Framework (NSRF-ΕΣΠΑ)
Research Programme THALIS (ΘΑΛΗΣ)

Main Research Field
Experimental Particle Physics

Job Summary
The GENESIS@LHC Research Network of the THALIS programme of NSRF, is a collaboration between the following Greek Institutes:
National Technical University of Athens (NTUA), (coordinator of the network, Prof. Th. Papadopoulou),
University of Athens (UoA) (responsible Prof. Ch. Kourkoumelis),
Institute of Nuclear and Particle Physics (INPP) Demokritos (responsible Dr. A. Markou).
In the framework of the network one Post-Doctoral position with gross annual salary of 28.8k euro and / or two (three) Doctoral fellowships with gross annual salary of 22.8k euro are allocated to the UoA. The GENESIS@LHC project has the overall aim of studying the mechanism of EW Symmetry breaking and search for new physics with the ATLAS and CMS detectors at the LHC.

Job Description
The program will provide the opportunity to experienced young researchers to take lead in one of the most challenging projects of our era and to new PhD candidates to work for their PhD thesis on frontier particle physics topics, contributing to understand the EW symmetry breaking mechanism or searching for New Physics through direct searches. The network combines expertise in both theoretical and experimental particle physics. The successful candidates will have the opportunity to participate in the 2012 data analysis of the ATLAS experiment and in the startup of the high energy run of LHC. They will elaborate in understanding the performance of the various reconstructed objects with emphasis on electrons, muons, jets and missing transverse energy and will play leading role in frontier physics issues covered by the potential of the Large Hadron Collider at the European Organisation for Nuclear Research (CERN). One position will be directed towards the cloud computing development and implementation in the sector of elementary particle physics. The academic PhD degrees will be obtained at the University of Athens.

Type of Contract: Temporary.
Status Full-time
Job starting day 01/12/2012
The starting date can be moved by a few months forward or backward
Application Deadline 30/10/2012

Qualifications
Post Doctoral candidates: Experienced Researchers (Post Doctoral candidates) eligible to carry independent research and work in a team. The candidates should be nationals of EU member state or Associate state or third country. The project may
require long stays at CERN (2-3 months per year) and a few weeks per year stays in one of the other collaborating institutes of the network.

**PhD candidates:** Young Researchers eligible to inscribe in a PhD program in Greece need a Master’s of Science degree or equivalent of a Greek, or other European, or equivalent University.

**Organisation/Institute Contact Data**
University of Athens
All applications should be sent by electronic mail (preferably in pdf format) to: Prof. Christine Kourkoumelis, Christine.Kourkoumelis@cern.ch
and should include:
- CV
- certificate of PhD degree or MSc degree for Post-Doctoral and PhD candidates respectively
- two letters of recommendation

**Required Education Level**
**Degree & Degree Field**
**For Post-Docs:** PhD degree or equivalent in Physics with specialization in Experimental particle Physics
**For PhD candidates:** BSc and MSc degrees in Physics and some experience in experimental particle Physics

**Required Language**
**ENGLISH**
**Reading level** Excellent
**Writing level** Excellent
**Comprehension level** Excellent
**Speaking level** Excellent

**Required Research Experiences**
**Main Research Field:** Physics, Experimental Particle Physics
**Years of Research Experience (for Post-Docs):** At least 4 years following BSc degree
**Years of Research Experience (for PhD candidate/Early Stage Researcher):**
Maximum 2 years experience in research