Erasmus Student Mobility for Placements

Host Organisation: Universidad de Zaragoza
Venue: Departamento de Física Teórica, Facultad de Ciencias, Universidad de Zaragoza, C/Pedro Cerbuna 12. 50009 Zaragoza (SPAIN)
Field of activities:

The Group of Nuclear and Astroparticle Physics of the University of Zaragoza has a long trajectory in the research of particle physics, participating in experiments with international collaborations at places like CERN, Geneva, but also in underground laboratories, such as the Laboratorio Subterraneo de Canfranc in the Spanish Pyrenees. The group is very active in the development of novel particle detectors for their application in the field. It counts with 11 researchers, several doctoral and master's students as well as technical engineering support personnel.

More information in:
http://gifna.unizar.es/trex/,
http://gifna.unizar.es/cast/ and
www.unizar.es

Planned dates of the placement period:
from October 2016 until December 2017 for a 3, 6 or 9 month-period (approx.)

Coordinator's name: Dr. Igor García Irastorza (e-mail: irastorz@unizar.es)

Contact: Applicants must send CV and motivation letter to: Dr. Gloria Luzón (email: luzon@unizar.es)

Details of the proposed training programme abroad

We are looking for a graduate, or an undergraduate in their last year of Computing engineering (or similar) or a physicist. The candidates should have good C/C++ programming skills, and generic computing/programming knowledge. II will be appreciated basics on particle physics.

Good knowledge of English is mandatory and knowledge of Spanish will be appreciated. Communication in French is also possible.

Knowledge, skills and competence to be acquired:

- Working experience developing and maintaining specialized software in a real research environment
- Working experience using generic C++ libraries developed at CERN for high performance data treatment and analysis (ROOT software: http//root.cern.ch)
- Team-working skills and experience in a research environment.
- Communication skills in foreign language
- Presentation and analytical skills incl. the ability to search and process information and communicate it effectively

Detailed programme of the training period:

The trainee will work for 37.5h/week from Monday to Friday. A detailed programme will be determined when the candidate will be here.

Tasks of the trainee:

- Development of small C/C++ modules (or improvement of the existing ones) to be incorporated to the software framework of the team, fulfilling specific requirements and under the guidance of the researchers of the group.
- Maintenance tasks of the code development SVN repository of the research group
- Development of transversal software tools of utility for the team (code documentation managers, event viewers, etc...) in C/C++, using existing code as a basis.
- Maintenance tasks of one of more of the web-based document repository platforms of the research group (web-sites, wiki, sharepoint,...)
- Participate in the regular meetings of the research group, discussions, presentations of work, etc...

Monitoring and evaluation plan:

During the placement a continuous evaluation plan will be carried out in order to identify any circumstances related with personal matters or the learning process that could affect the trainee or the organization.
Meetings between the trainee and the mentor will be developed on a regular basis.