

GRUPO DE FÍSICA NUCLEAR Y ASTROPARTÍCULAS Facultad de Ciencias UNIVERSIDAD DE ZARAGOZA 50009 ZARAGOZA. ESPAÑA

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 September 2015 until June 2016 for a 3, 6 or 9 month-period (approx.)

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

Contact: Applicants must send CV and motivation letter to: Dr. Theopisti Dafni (email: tdafni@unizar.es)

Details of the proposed training programme abroad

We are looking for a graduate, or an undergraduate in their last year of Mechanical engineering (or similar), in order to work as part of the technical team supporting the research of the host group, and contribute to the mechanical work (design of detector components, mechanical assembly, shielding, etc) needed as part of the development of new particle detectors.

Good knowledge of English is mandatory and knowledge of Spanish will be appreciated.

Knowledge, skills and competence to be acquired:

- Working experience with specific design software
- 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



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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:

- Perform computer-assisted design (CAD) tasks of key components of particle detectors under the supervision of senior engineer of the group
- Follow the construction/machining of pieces by the technicians at the local workshop or in external companies.
- Assist in the mounting of particle detectors and the associated setup (platform, shielding, etc...)
- Assist in the design and construction of ancillary systems to the detector setups (e.g. gas circulation system, etc...)
- Assist in other generic tasks supporting the laboratory activities of the research team
- 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.