Laboratoire LEPRINCE-RINGUET

École polytechnique - IN2P3/CNRS

Detection of photons in an highly granular hybrid ECAL for the ILC

Project description

The Laboratoire Leprince Ringuet (LLR) in France, laboratories of the IN2P3 within the CNRS, is searching for a post-doctoral researcher. The research entails detector development for a detector to be operated at a future linear electron-positron collider. The group is heavily involved in the R&D on a Silicon-Tungsten electromagnetic calorimeter and its applications for the ILC detector and elsewhere. The group members and activities are described on http://llr.in2p3.fr/spip.php?rubrique50 (in French).

The successful candidate is expected to contribute to the development of reconstruction techniques for different ECAL designs (Silicon, scintillator and hybrid types) and a study of these technologies' respective strengths and weaknesses to measure fundamental physical properties. This requires to improve existing algorithms, developed for the Silicon-based prototype, for the more complex geometry and integrate them in a wider Particle Flow algorithm set used in large detectors such as the ILD and test the sensitivity to specific physics processes. A participation to foreseen beam test campaign and data analysis is also expected.

Candidate profile

Candidates are required to have a Ph.D in experimental high physics or a related field by date of appointment. Interest and skills in data analysis and software development are premises for a successful application.

The post will be available latest on Oct. 1st 2011 for 24 months. Salary and benefits will commensurate with the ones of a Level 2 Researcher (CR2) at the CNRS, approximately 2500 €/month gross salary (2100 €/month net).

In case of interest please send your CV including a list of publications, a brief letter of motivation (1 page max.) and at least two letters of reference. All documents are to be sent until 15/03/2011 by e-mail (pdf preferred) to

Vincent Boudry (Vincent.Boudry@in2p3.fr) and

Daniel Jeans (Daniel.Jeans@llr.in2p3.fr)

Candidates are asked to prepare to be available for an interview afterwards. The interview will be held at LLR or, if more convenient, via video conference.

The post is provided by the "Physique des 2 infinis", more information is to be found at http://events.lal.in2p3.fr/P2I/AO-2011/AO-2011.html