Postdoctoral Position in Experimental Neutrino Physics at CIEMAT Madrid

The CIEMAT Neutrino Group at the Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT) in Madrid is offering a two-year Postdoctoral Position in Experimental Neutrino Physics funded by the European H2020 Project AIDA-2020 (Advanced European Infrastructures for Detectors and Accelerators) http://aida2020.web.cern.ch/ to work on R&D on future large liquid cryogenic detectors, with applications in neutrino physics and dark matter searches. The CIEMAT group is the leader of the light readout task of the AIDA-2020 large-scale liquid cryogenic detectors working group.

The CIEMAT Neutrino Group participates in the Double Chooz reactor neutrino experiment in France, in the WA105 (protoDUNE dual-phase) liquid argon TPC experiment at CERN and in the DUNE long-baseline neutrino experiment in Fermilab (USA). In particular CIEMAT is in charge of the photodetection system of the WA105 experiment at CERN and is developing an R&D on the LAr scintillation light detection with new photosensors. In addition, CIEMAT also participates in the ArDM dark matter experiment at the Canfranc underground laboratory.

Candidates should have a PhD in Experimental Particle Physics and demonstrated experience in detector developments, instrumentation and detector hardware. The experience in neutrino detectors, liquid argon TPCs and photosensors will be specially recognized. The selected candidate is expected to take a leading role in the evaluation of large-area photodetectors for the readout of the scintillation light in liquefied noble gases, assessment of wavelength-shifting techniques and digitization techniques. The candidate will actively participate in the supervision of PhD students. Frequent visits to CERN and other institutes involved in the AIDA-2020 project will be required.

The expected start date for this position will be Summer 2016. Consideration of applications will start immediately and will continue until the position is filled. Interested candidates should send their applications in pdf format (including a CV, a summary of their research experience and a statement of their research interests) to ines.gil@ciemat.es. They should also arrange for at least 2 letters of recommendation to be sent to this address.

Informal enquiries about this position may be addressed to Dr. Inés Gil-Botella (ines.gil@ciemat.es).

The CIEMAT Particle Physics Group has been recently accredited as a Unit of Excellence by the Spanish Ministry of Economy and Competitiveness. This Unit is an affirmative action/equal opportunity employer.