

Postdoctoral position at IJCLab-Orsay (France):

Experimental developments towards the future Electron-Ion Collider

A postdoctoral position is opened for application at IJCLab (Laboratoire de Physique des 2 infinis Irène Joliot-Curie) within the Paris-Saclay University in Orsay

Our group is strongly involved in the developments aimed at the realization of the future Electron-Ion Collider (EIC) at Brookhaven National Laboratory (BNL, U.S.A.) and is seeking talented candidates to join our team.

Our physics interests are geared to the three-dimensional imaging of nucleons and nuclei through the study of deeply virtual exclusive reactions. With this goal, we are pursuing an R&D program in high resolution electromagnetic (EM) calorimetry towards the construction of the backward endcap EM calorimeter of the EIC detector. This calorimeter will be based on a combination of scintillating crystals and high resolution glass currently under development. In addition, we are interested in the detection of very forward scattered particles in the Roman Pots (RP) in the hadron-going far-forward region. The RP are planned to use the AC-LGAD technology and we are contributing to the development of a readout ASIC for them.

Description of the work

The selected candidate will be stationed in Orsay with supported travel to BNL and Jefferson Lab during the duration of the appointment. She/he will lead simulations of the EIC detector to better define its requirements of the exclusive physics program. She/he will also be expected to take a prominent role in the R&D work in calorimetry and/or readout electronics for the RP.

The selected candidate will be encouraged to co-supervise PhD students on the project.

Strong computing skills and experience with hardware are required. A good command of English is also necessary.

Deadline for application is October 31, 2021.

The position is available immediately and will remain open until filled. This is a one-year appointment, which could be renewed for 1 or 2 additional years contingent upon available funding and satisfactory performance. Candidates are required to have a PhD in experimental nuclear or particle physics by the appointment start date. The position is aimed for young researchers, with a maximum of 3 years of experience after their PhD. Candidates who recently defended or are about to defend their PhD are particularly encouraged to apply.

For full consideration, applicants should submit a CV, a motivation letter and arrange 3 letters of reference to be sent to Dr. Carlos Muñoz Camacho (carlos.munoz@ijclab.in2p3.fr) before October 31, 2021.

For further information, feel free to contact Carlos Munoz Camacho at the above email address.