Post-doctoral position in experimental hadron physics at CEA Saclay (DRF/Irfu/DPhN/LSN)

The Nucleon Structure Laboratory (LSN) of CEA Paris-Saclay is opening a postdoc position for a junior physicist in the field of experimental hadron physics with a focus on simulation and data analysis of deep exclusive processes for Jefferson Laboratory. The position is for one year renewable for a second year with fundings already secured.

The LSN is part of the Nuclear Physics Division (DPhN) of the Institute of Research into the Fundamental Laws of the Universe (Irfu) located at CEA Paris-Saclay (France). It is composed of ten permanent staff physicists working in the field of hadron physics on both theoretical and experimental aspects. Irfu is a highly dynamic scientific environment including research divisions on astrophysics, nuclear and particle physics as well as strong technical and engineering divisions in instrumentation, cryogenics and accelerator technologies.

The LSN has a strong commitment in the experimental and theoretical investigation of the 3D structure of the nucleon, through the study of processes such as deeply virtual Compton scattering (DVCS). In particular, LSN physicists have contributed to the analysis of existing DVCS measurements, the experimental programs using CLAS12 in Jefferson Lab and COMPASS-II at CERN, and the development of the physics case of the electron-ion collider project.

The first year of this postdoctoral position will be devoted to the phenomenological and feasibility studies of the measurement of the recoil proton polarization in deep exclusive processes. The second year will be dedicated to the analysis of CLAS12 data collected in 2018, focusing on deep exclusive processes.

Applicants should have completed a PhD in experimental nuclear or high-energy physics, have expertise in data analysis using object-oriented programming and GEANT Monte-Carlo simulations for a maximum of a six years experience after the PhD. A prior experience with the development of instrumentation for large-scale nuclear or particle physics experiments would be beneficial.

Applications should include:

- A 2-page cover letter with a description of previous work experience.
- An academic CV including a list of the candidate's most relevant publications, analysis notes or talks given in international conferences or workshops.
- 2 recommendation letters.

Applications should be sent before October 31st 2020 or until position is filled to maxime.defurne@cea.fr. More information may be requested at the same email address.

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