CEA DRF IRFU Département de Physique Nucléaire



Postdoctoral researcher position in ALICE at Saclay

The Quark Gluon Plasma Laboratory (LQGP) of CEA Paris-Saclay is opening a postdoc position for a junior physicist in the field of experimental physics with a focus on Run 3 data analysis with ALICE. The position is for two years initially. The LQGP 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). The LQGP is composed of eight permanent staff physicists working in the field of heavy-ion physics. 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 LQGP has a strong commitment in the experimental investigation of the Quark-Gluon Plasma through the study of heavy-ion collisions. In particular, LQGP physicists have been instrumental to the study of quarkonium production, currently focusing on the experimental program of ALICE at the LHC.

For the long term future, the LQGP is also contributing to the development of the heavy-ion physics case and the required LHCb Upgrade 2, with a particular interest in tracking. The post-doctoral position is part of the broader local 4-year research program "Gluodynamics", which aims at : i.) the investigation of the QCD force and radiation within QCD fluids; ii.) the understanding of the nucleon and nuclear geometry and the conceptual and practical connections between this and the hot QCD fields of research; iii.) the development of future projects for QCD research at the LHC and at the EIC.

The successful candidate is expected to play a leading role in the analysis of the first ALICE Run 3 data, in particular on quarkonium and beauty hadron studies with the upgraded muon arm of ALICE. Depending on personal preference, she/he will have the opportunity to also contribute to other LQGP interests and activities such as analysis of Ultra-Peripheral Collisions (UPC), initial state phenomenology, detector commissioning of the newly installed Muon Forward Tracker, or detector development in view of the upgrade of LHCb in the 2030ies. Applicants should have completed, at the time of start, a PhD in experimental nuclear or high-energy physics, have expertise in data analysis using object-oriented programming, and have 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 April 20th 2021 to michael.winn@cea.fr  $\square$ . Questions related to the postdoc opening may be sent to the same email address.

**Gluo**dynamics



