

Junior staff position in the Nuclear Physics Division at Saclay

The CEA-Saclay Quark-Gluon Plasma Laboratory (LQGP) is opening a junior staff position for an outstanding physicist in the field of experimental quark-gluon plasma physics.

The LQGP is part of the Department of Nuclear Physics (DPhN) of the Institute of Research into the fundamental laws of the Universe (Irfu) located at CEA Paris-Saclay (France), a member of Université Paris-Saclay. It is composed of eight permanent staff physicists working in the field of experimental quark-gluon plasma physics, specifically on the ALICE experiment at CERN/LHC and the sPHENIX experiment at RHIC. After run 4 of LHC, the physicists of LQGP envision to continue their involvement at CERN turning to the LHCb experiment.

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. Inside Irfu, DPhN focuses its research on the nucleon and the nucleus, with studies ranging from nuclear structure and reactions to hadron structure and quark-gluon plasma.

The LQGP has a strong commitment in the present experimental program of ALICE and in its upgrade for the upcoming Run 3. This concerns the physics analysis, in particular in the quarkonia sector, J/ψ and Upsilon, decaying in a muon pair detected with the ALICE Muon Spectrometer. The participation to the sPHENIX experiment would also offer analysis opportunities at a lower energy.

For the far future, the group envisions a participation to the LHCb heavy ion program at the horizon of Run 5. A R&D for CMOS pixels in view of the upgrade of the Upstream tracker of LHCb is already engaged. An important activity in the coming years will be the assessment of the performances of the LHCb detector for the heavy ion physics program where the new staff member would play a key role, in addition to a participation in on-going analysis of experimental data.

A Ph.D. or equivalent in experimental nuclear or particle physics, with no less than two years of post-doctoral experience is requested. A solid background in QGP physics is highly desired. In-depth experience in high-energy experiments with a good knowledge in detector systems, software, GEANT Monte Carlo simulations, and data analysis, is required. Past experience with silicon detectors would be appreciated.

Candidates should send a cover letter describing their research activities and prospects, a Curriculum Vitae including a list of recent or important publications, at least two letters of recommendation, a copy of their PhD thesis as well as the jury reports on their manuscript and/or PhD defense when applicable. Documents should be sent preferably by email to danielle.coret@cea.fr (cc: a.baldisseri@cea.fr), or alternatively by postal mail to:

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For full consideration, all application materials must be submitted by the 25th of February 2022. A committee will release the list of candidates selected for an interview before end of March 2022. The interviews of selected candidates are foreseen before end of April 2022. For inquiries, please contact Alberto Baldisseri (a.baldisseri@cea.fr).