Title: Contribution to the CMS Experiment Phase 2 Tracker Upgrade Program

Position: CNRS post-doctoral position  
Duration: 2 years  
Contract Start: from November 1\textsuperscript{st}, 2018  
Application Deadline: October 31\textsuperscript{st}, 2020

Job Description:

The Institut de Physique Nucléaire de Lyon (IPNL), a joint laboratory of the French IN2P3/CNRS and the Université Claude Bernard Lyon 1, invites applications for a postdoctoral researcher position to work on the CMS experiment.

The IPNL is a founding member of CMS and had a key role in the development, installation and commissioning of the electromagnetic calorimeter and tracking detectors as well as the commissioning of photons and tracks. The group has also made important contributions in the area of top quark physics, in particular in searches for resonances in top pair decays, and in the area of Higgs boson searches, in particular in the Higgs to two photons decay channel. Finally, the group has important responsibilities in the CMS upgrade effort.

The successful applicant will reinforce the team’s activities in the tracker upgrade sector, where the group has a strong commitment in the design and integration of the future detector. We are setting up an integration centre for outer tracker dees, which are the main component of the future tracker endcap (TEDD). We are leading the development of the concentrator ASIC (CIC), which is an essential block of the future detector readout chain.

The candidate should have experience in instrumentation, and is expected to make a strong contribution to the preparation of the CMS Phase-2 tracker upgrade. (S)he will take part to the characterisation of the CIC ASICs, to beam test campaign, and finally to the preparation of the clean room and of the test system (DAQ setup, CO2 cooling system, slow control, etc.) dedicated to the dees integration. Although the work will be carried out mostly at IPNL, frequent working period at CERN are foreseen. Appointment is for two years, with a net salary of 24600€ per year.

Applicants must have a doctoral degree in experimental particle physics at the time of appointment, less than two years of post-doctoral experience, and should provide a statement of research interests, a CV with list of publications, and arrange for three letters of recommendation to be received at the below address prior to the application deadline. The deadline for applications is July 15\textsuperscript{th}, 2018.

Contact: VIRET Sébastien (s.viret_at_ipnl.in2p3.fr)

Phone: +33472431065

Address: Institut de Physique Nucléaire de Lyon, Domaine scientifique de la Doua, Bâtiment Paul Dirac, 4, Rue Enrico Fermi, 69622 Villeurbanne Cedex

Letters of reference should be sent to: VIRET Sébastien