

Postdoc on CMS at IPHC Strasbourg

The CMS group at the Institut Pluridisciplinaire Hubert Curien (IPHC Strasbourg, France) has an opening for a postdoctoral researcher in experimental particle physics. A young researcher, preferably less than two years after PhD defense, is looked for. The position, mostly based at IPHC-Strasbourg, is for 2 years and can start in September 2019. A good experience in physics analysis and silicon detector at LHC experiments is desirable. Knowledge on (or interests in learning) instrumentation is important. The postdoctoral researcher will take responsibility in test beam activities and will participate to DAQ developments for the CMS phase-2 tracker upgrade at HL-LHC. Furthermore she/he could participate, with a lower priority, to the analysis of the CMS Run 2 and Run 3 data.

The IPHC group is highly involved in the construction of both the inner tracker (IT, pixels) and outer tracker (OT, silicon strips) of the CMS phase-2 upgrade. First, the IPHC is currently building a new beam line dedicated to the studies of tracker module performance under a high particle rate. The postdoctoral researcher will participate and take responsibility in the preparation, operation and analysis of the related test beams. Second, IPHC is involved in the DAQ development of the IT. The postdoctoral researcher will participate to the implementation of the calibration procedures and porting in a prototype of a SoC system. He will work together with the local team of firmware/software engineers, who will take care of the most technical aspects. Finally, IPHC is in charge to integrate half (2200) of the silicon strip modules of the outer tracker barrel (TB2S), and to mount the TB2S wheel, as well as to design and build its support pieces. In that context, the postdoctoral researcher will participate to the preparation of the integration line for the new outer tracker modules. In addition, the postdoctoral will have the opportunity to participate to a search for long lived particles using the Run 2 and Run 3 CMS data. Knowledge on the functioning of tracking and tracker is critical for this analysis.

The review of applications is starting now and will continue until the position is filled. The job can start in September 2019.

Applicants should send (by email) their curriculum vitae, a list of publications indicating their personal contributions, a description of their previous activities and a short statement of research interests, all in pdf format, to Daniel Bloch (daniel.bloch@iphc.cnrs.fr) and Jérémy Andrea (jeremy.andrea@iphc.cnrs.fr).

Applicants need to arrange for two letters of reference to be sent directly at the same email addresses.