

Postdoc Position at IPHC Strasbourg

Analysis of CMOS pixel data from the new vertex detector of the STAR experiment

The STAR experiment (RHIC, BNL) goes through an upgrade of its internal tracker in order to adapt it to the RHIC luminosity increase and to improve its charm tagging capabilities. The innermost part of the tracker (called "PIXEL") will be composed of two layers of CMOS pixel sensors designed at the IPHC of Strasbourg. This detector is going to be the first ever equipped with this kind of pixels, selected for their high spatial resolution combined with a low material budget and modest power consumption. The PIXEL detector is planned to be commissioned in 2012 and be fully operational for the 2013/14 data taking campaign, dedicated to Au-Au collisions.

The IPHC group has an opening for a 3-year postdoc position starting in October 2010. The candidate is expected to simulate the pixel sensor response to traversing particles, and to get involved into the cluster finding and track reconstruction software development. He should be very active in commissioning this software with the first data collected and perform physics analyses exploiting the data provided by the PIXEL. The software packages developed are also expected to be useful for the ALICE experiment, which might undergo a similar upgrade of its internal tracker on a longer time scale.

The tasks of the candidate will take place in close collaboration with the partners of IPHC at the Lawrence Berkeley National Laboratory (LBNL, USA), where the candidate will spend a significant fraction of his/her activities. He/she will also spend some time at the Brookhaven National Laboratory (BNL), where the experiment will be running.

To apply, please send CV, shortlist of publications and two or three references (or arrange for two or three letters of reference) to be sent per e-mail to Prof. Marc Winter at IPHC (Marc.Winter@ires.in2p3.fr).

More information on the group activities: <http://www.iphc.cnrs.fr/-CMOS-ILC-.html>