

**TWO POST DOCTORAL POSITIONS AT UCL (BELGIUM) ON GRID AND CMS PHYSICS
SOFTWARE**

The High Energy Physics group of the Louvain University (UCL) in Louvain-la-Neuve (Belgium) invites applications for two positions at the post-doctoral level to work on the CMS experiment at the Large Hadron Collider (LHC).

One of the two selected persons will have a leading role in setting up and steering the UCL site of the Belgian TIER-2 CMS-GRID center. The second person is expected to contribute significantly to the development of the CMS reconstruction software (in particular Energy Flow algorithms) and to the preparation for the physics analyses. Depending on the profiles and wishes of the candidates, it is not excluded that they will carry out both activities in collaboration.

The Louvain group is active in several hardware and software related areas of CMS (<http://www.fynu.ucl.ac.be/themes/he/index.html>).

The hardware activities concentrate on the construction of the forward silicon tracker detector of CMS. Integration and testing of about 40 large tracker sectors will be performed at UCL.

The group has been involved in the tracker test beams at CERN and has responsibility in the areas of data handling, calibration, monitoring and commissioning software for the CMS Tracker. An important contribution is expected to be given at the future magnet test at CERN.

In addition, the group is involved in the development of the CMS software and in the LHC phenomenology studies. This activity includes three main fields of research: the development of the high level trigger steering algorithms, feasibility studies on searches for exotic Higgs boson representations (not exclusively within SUSY), and the measurement of high-energy photon interactions at the LHC, including the associated phenomenology. These studies are pursued in close collaboration with theoreticians within the Center for Particle Physics and Phenomenology recently created at the UCL (<http://cp3.phys.ucl.ac.be/>).

The CMS Collaboration is currently setting up a worldwide distributed computing infrastructure based on GRID technology to process and analyse the enormous amount of data that will be produced by the experiment. The University of Louvain will be one of the two sites hosting the Belgian Tier-2 centre.

The selected candidates will be based in Louvain-la-Neuve but extended stays at CERN are foreseen. Duration of the contracts is two years, with possibility of extension. Closing dates for applications is 30th of September 2005, but the positions will remain open until suitable candidates are found. The appointments should ideally start in October 2005.

Interested candidates should send curriculum vitae and arrange to have two letters of recommendation sent to:

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