

# Post-doctoral research position within the LHCb Group at Clermont-Ferrand

May, 2015

We invite applications for a post-doctoral position in experimental Particle Physics research, to work on the LHCb experiment at the CERN Large Hadron Collider. The successful candidate will be based at the *Laboratoire de Physique Corpusculaire, Clermont-Ferrand*, (<http://clrwww.in2p3.fr>), France.

The LHCb experiment is dedicated to the precision study of CP Violation and rare b decays. The French laboratories have strongly contributed to the realisation of the *Calorimeters* and the *First Level Trigger* of the experiment. They are also actively engaged in the analysis of the physics data and on the upgrade of the detector expected in 2018.

The Clermont LHCb team has played a leading role in the construction and the commissioning of the *Pre-Shower* part of the calorimeter system and the first level trigger Decision Unit. They are now committed to their operation. These responsibilities include the detector calibration and performance monitoring.

The Clermont LHCb team has a wide range of physics interests and made substantial contributions to the measurements of radiative B decays and hadronic multibody charmless b-hadron decays. Ongoing activities are focusing on CP-violating observables measurements in radiative decays ( $B_s^0 \rightarrow \phi\gamma, \rho\gamma, \omega\gamma$ ) and charmless hadronic decays ( $B_{d,s}^0 \rightarrow K_s hh', \Lambda_b \rightarrow p h h h$ ) as well as time reversal studies in baryon decays.

The Clermont LHCb team is also involved in the design of the electronics, and its cooling system, for the new scintillating fibers tracking detector which will be used for the upgrade of LHCb.

The successful applicant is expected to contribute significantly to the LHCb detector operation, including upgrade developments, as well as taking an active part in the major experimental and data analysis activities.

Interested applicants should have a PhD degree in Particle Physics. They should submit a cover letter explaining the interest in the position, a Curriculum Vitæ, a description of their research experience with a list of publications highlighting their personal contributions, a proposal for a research project within LHCb and arrange for three letters of recommendation to be sent to:

Pascal Perret (LHCb LPC Clermont): [perret@in2p3.fr](mailto:perret@in2p3.fr)

Applications should be received before July 15<sup>th</sup>, 2015.

The appointment is for 2 years, starting on September 1<sup>st</sup>, 2015. The position is funded by the French CNRS with no nationality restriction. Depending on previous working experience, the candidate can expect a net monthly salary between 2000 € and 3000 €.

More information can be obtained from:

- LHCb, Clermont, Pascal Perret ([perret@in2p3.fr](mailto:perret@in2p3.fr))
- Director of LPC Clermont, Alain Falvard ([falvard@clermont.in2p3.fr](mailto:falvard@clermont.in2p3.fr))
- LHCb France, Renaud Le Gac ([legac@cppm.in2p3.fr](mailto:legac@cppm.in2p3.fr))
- <http://clrwww.in2p3.fr/spip.php?rubrique83>