

The Experimental High Energy Physics group at Universitat de Barcelona is looking for a postdoc and a PhD student to work on LHCb data analysis and Real Time Analysis software, in the context of the ERC-StG CLIMB.

The Experimental High Energy Physics group at Universitat de Barcelona has an extensive experience in data analysis involving rare decays, has participated since the inception of the detector in calorimetry R&D and has applied its expertise to the development of photon and electron reconstruction methods.

The successful candidates are expected to take an active role in LHCb data analysis regarding the study of b to d I+ I- decays, as well as in the improvement of the reconstruction and identification of electrons in the Run 3 setup, and its calibration. They will also participate in the commissioning and data taking efforts during Run 3. Involvement in R&D for the LHCb Upgrade 2 is also possible.

A PhD in Physics or equivalent is required for the postdoc position. Previous experience in data analysis and reconstruction methods is desired. Knowledge of the LHCb software framework is a plus but no mandatory. An MSc title is required to enrol as a PhD student at Universitat de Barcelona. Students who expect to complete their MSc during this course are encouraged to apply too. Knowledge of particle physics and data analysis techniques will be valued.

The positions are available starting from April 1st. We offer full-time three- and four-year contracts for the postdoc and the PhD student, respectively. The positions are based in Barcelona but frequent travel to CERN is foreseen.

Instructions on how to apply will be announced shortly. A two-pages CV, a cover letter summarising the research interests and two recommendation letters will be required for the application. Informal enquiries can be addressed to <u>carla.marin.benito@cern.ch</u>.