

Six PhD student positions on the charm-Higgs couplings with the CMS experiment

Jointly between the University of Antwerp, Ghent University and the Vrije Universiteit Brussel, a new project is being funded in Belgium on the topic of the charm-Higgs coupling with the CMS experiment. The research will range from developing flavour tagging and lepton identification methods to the analysis of various channels sensitive to this coupling and possibly related phenomena beyond the standard model. In parallel, we are working on the upgrades of the CMS detector, with a major joint Belgian responsibility in the Outer Tracker, as well as a commitment in the muon systems based on GEM and RPC technologies. Several professors are involved in the project, together with at least 6 PhD students and at least 6 postdocs.

At this stage, we are opening a call for candidates for the six PhD student positions. These positions are based in Antwerp, Ghent or Brussels and are intended for four years (renewed annually after positive evaluation) leading to a PhD degree.

We welcome applications and begin reviewing them on June 23, 2023. Successful candidates can start shortly after. Applicants should submit a comprehensive CV including study results, a 2-page research statement related to CMS and the topic of the project, and should arrange for two reference letters to be submitted.

The professors involved are Jorgen D'Hondt, Didar Dobur, Steven Lowette, Michael Tytgat and Pierre Van Mechelen. Your application file and the reference letters are to be submitted to these professors via the following email address: be-charm-Higgs-vacancies@cern.ch.

Contacts for more information:

Jorgen.DHondt@vub.be, didar.dobur@UGent.be, steven.lowette@vub.be,
Michael.Tytgat@vub.be, Pierre.VanMechelen@uantwerpen.be.