

Higgs searches at LHCb

Wednesday, November 9, 2022 11:30 AM (20 minutes)

LHCb is a spectrometer that covers the forward region of proton-proton collisions, in the pseudo rapidity range from 2 to 5. Thanks to the relatively background-free events in the high mass region, the precise reconstruction, and the trigger system with low energy thresholds, LHCb is the ideal place to search for (exotic) Higgs decays in a complementary space with respect to ATLAS and CMS. In this talk, the latest searches on BSM Higgs decays performed at LHCb will be presented, and the prospects for future LHC data-taking periods will be given. Moreover the possibility of observing the Standard Model $H \rightarrow b\bar{b}$ and $H \rightarrow c\bar{c}$ decays at LHCb in the future LHCb upgrades will be discussed.

Type of talk

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Session Classification: Wednesday Plenary Session