Contribution ID: **432** Type: **Parallel session talk**

Higgs Physics at LHCb

Friday 19 July 2024 10:45 (17 minutes)

LHCb functions as a spectrometer targeting the forward region of proton-proton collisions, focusing on a pseudo-rapidity range between 2 and 5. Due to the scarcity of background events in the high mass region, along with its precise reconstruction capabilities and a trigger system featuring low energy thresholds, LHCb offers an optimal environment for probing (exotic) Higgs decays, complementing the efforts of ATLAS and CMS. This presentation will delve into the latest investigations into Beyond the Standard Model (BSM) Higgs decays conducted at LHCb, along with outlining the potential avenues for future data collection periods at the LHC. Additionally, the search for H->bb and H->cc decays will be presented, with a focus on the latest results obtained using the full Run 2 dataset. Finally, prospects on the Standard Model Higgs searches are presented, with an eye toward the future LHCb experiment upgrades.

Alternate track

I read the instructions above

Yes

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