

Jet fragmentation measurements at LHCb

Friday 19 July 2024 09:15 (15 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, its precise reconstruction capabilities and an optimized trigger system, LHCb offers an optimal environment for probing (exotic) Higgs decays. In this talk, we discuss the latest investigations into Beyond the Standard Model (BSM) Higgs decays at LHCb, and the potential avenues for future data collection. The search for $H \rightarrow b\bar{b}$ and $H \rightarrow c\bar{c}$ 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. This talk will present published results for measurements of nonidentified hadrons within light quark-initiated jets as well as the status of other ongoing hadronization measurements at LHCb.

I read the instructions above

Yes

Alternate track

1. Top Quark and Electroweak Physics

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