Weak decays of beauty baryons at LHCb

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Weak decays of beauty baryons offer an attractive laboratory to search for effects beyond the Standard Model (SM), complementary to searches in meson decays. Flavour changing neutral currents such as $b \to s \ell^+ \ell^-$ transitions are of particular interest due to their high suppression in the SM. The LHCb experiment is ideally suited for the analysis of these decays due to its high trigger efficiency, as well as excellent tracking and particle identification performance. However, the properties of weakly decaying b baryons are not precisely determined yet, due to their low production cross-sections. Therefore, recent updates on precision measurements of b baryon properties as well as studies of baryonic $b \to s \ell^+ \ell^-$ transitions are presented

Alternate track

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