

Measurement of the lifetime of the doubly charmed baryon Ξ_{cc}^{++} at LHCb

Thursday, 20 December 2018 14:45 (15 minutes)

The Doubly charmed baryon Ξ_{cc}^{++} was observed by the LHCb experiment in 2017. Measurements of its properties will allow for precise tests of QCD, the theory of strong interactions, in a unique environment. In this talk, we present the first measurement of the lifetime of the doubly charmed baryon Ξ_{cc}^{++} , with signals reconstructed in the final states $\Lambda_c^+ K^- \pi^+ \pi^+$ from the data sample collected by the LHCb experiment, corresponding to an integrated luminosity of 1.7 fb^{-1} . The measured Ξ_{cc}^{++} lifetime is $0.256_{-0.022}^{+0.024} \pm 0.014 \text{ ps}$.

Type

Parallel talk

Sessions (parallel only)

Heavy Flavor

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