

Charmed baryon decays at BESIII

Saturday 20 July 2024 14:30 (15 minutes)

BESIII has accumulated $4.5 fb^{-1}$ of e^+e^- collision data at the 4.6 and 4.7 GeV energies, presenting a unique opportunity to investigate Λ_c^+ decays. Our presentation will include the first measurement of the decay asymmetry in the pure W-boson-exchange decay $\Lambda_c^+ \rightarrow^0 K^+$, as well as the study of $\Lambda_c^+ \rightarrow \Lambda l^+ \nu$ and the branching fraction measurements of the inclusive decays $\Lambda_c^+ \rightarrow X e^+ \nu$ and $\bar{\Lambda}_c \rightarrow \bar{n} X$. Furthermore, we will present the results of the partial wave analysis of $\Lambda_c^+ \rightarrow \Lambda \pi^+ \pi^0$, and the latest branching fraction measurements of Cabibbo-suppressed and Cabibbo-favored Λ_c^+ decays, including $\Lambda_c \rightarrow p \pi^0, \Sigma^- K^+ \pi^+, p \eta(\omega)$, and more.

Alternate track

1. Strong Interactions and Hadron Physics

I read the instructions above

Yes

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Session Classification: Quark and Lepton Flavour Physics

Track Classification: 05. Quark and Lepton Flavour Physics