

Charmed baryon decays at BESIII

Wednesday, 5 June 2024 11:00 (30 minutes)

BESIII has accumulated 4.5 fb^{-1} of e^+e^- collision data within the 4.6 and 4.7 GeV energy range, 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 $\Lambda_c^+ \rightarrow \Xi^0 K^+$, 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 $\Lambda_{\text{cbar}}^- \rightarrow \text{nbar} X$.

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 -favored Λ_c^+ decays, including $\Lambda_c^+ \rightarrow p \pi^0$, $\Sigma^- K^+ \pi^+$, $p \eta$ (ω), and more.

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