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Charmed baryon decays at BESIII

BESIII has accumulated 4.5 fb^-1 of e+e- collision data in the 4.6 and 4.7 GeV energy range, which provides the largest dataset of Lambda_c- Lambda_c pairs in the world.

Our presentation will include the observation of a rare beta decay of the charmed baryon Lambda_c+ -> n e+ nu with a Graph Neural Network and the first measurement of the decay asymmetry in the pure W-boson-exchange decay Lambda_c+ -> 926;0 K+, as well as the branching fraction measurements of the inclusive decays Lambda_c+->X e+ nu and Lambda_cbar--> nbar X.

Furthermore, we will present the results of the partial wave analysis of Lambda_c+ to Lambda pi+ pi0, and Lambda_c+ to Lambda pi+ eta Lambda, Our presentation will also include branching fraction measurements of Cabibbo-suppressed decays, including Lambda_c+ to p pi0, and the measurements of KS-KL asymmetries in the Lambda_c+ decays.

Secondary track

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