

Peak-like structures observed in Λ_c decays at Belle

Wednesday, 7 June 2023 16:55 (25 minutes)

In this presentation, we report on two recent results on peak-like structures observed in Λ_c decays at Belle. One is from $\Lambda_c \rightarrow pK^-\pi^+$ decay where a peak near the $\Lambda\eta$ threshold is observed in the pK^- mass spectrum. We studied the peak shape using a standard Breit-Wigner and Flatté distributions, and found the latter represents the shape by more than 7σ . This result indicates that the observed peak is actually a threshold cusp.

In the second part, we report on the peak-like structure in $\Lambda\pi^\pm$ mass spectrum near the $\bar{K}N$ threshold in $\Lambda_c \rightarrow \Lambda\pi^+\pi^+\pi^-$ decay. We will show results of fits to Breit-Wigner distribution and an effective-range expansion model by Dalitz and Deloff [R. H. Dalitz and A. Deloff, Czech. J. Phys. B 32, 250 (1982)].

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Session Classification: Heavy baryon spectroscopy

Track Classification: Heavy baryon spectroscopy