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Type: Parallel session talk

QCD factorization tests with $\bar{B^0}\to D^{(*)+}\pi^-$ and $\bar{B^0}\to D^{(*)+}K^-$ decays at Belle

Monday, 26 July 2021 10:00 (15 minutes)

We report new results of the branching fractions $\mathcal{B}(\bar{B}^0 \to D^{*+}\pi^-)$ and $\mathcal{B}(\bar{B}^0 \to D^{*+}K^-)$ measured using $772 \times 10^6 B$ -meson pairs recorded by the Belle experiment. The ratio of the branching fractions is measured in a way that allows for the cancellation of systematic uncertainties arising from the *D*-meson reconstruction. Furthermore, we report a new high-precision test of QCD factorisation by measuring ratios of $\bar{B}^0 \to D^{*+}h^ (h = \pi, K)$ and $\bar{B}^0 \to D^{*+}\ell^- \bar{\nu}_\ell$ decays at fixed momentum transfers for different particle species. The talk also covers related measurements of $B \to Dh$ decays performed with the full Belle data.

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Collaboration / Activity

Belle

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