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## Branching fractions and CP asymmetries in $B$ decays through $b \rightarrow c$ process at Belle

*Thursday, 7 July 2022 09:00 (17 minutes)*

We report results of the branching fractions  $\mathcal{B}(\bar{B}^0 \rightarrow D^{*+}\pi^-)$  and  $\mathcal{B}(\bar{B}^0 \rightarrow D^{*+}K^-)$  measured using  $772 \times 10^6$   $B$ -meson pairs recorded by the Belle experiment at the KEKB asymmetric-energy  $e^+e^-$  collider. The measurements provide a precise test of QCD factorization. We also report the study of the branching fraction  $B^+ \rightarrow D_s^{(*)}(\eta, K_S)/D^+(\eta, K_S)$  and the time-dependent CP asymmetry in  $B \rightarrow \eta_c K_S$ . The latter measurement provides information about  $\sin 2\phi_1$ .

### In-person participation

Yes

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