

Bs decays at Belle

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Observation of $B_s \rightarrow J/\psi\eta$ and Search for $B_s \rightarrow J/\psi\eta'$

We report the first observation of the CP eigenstate decay $B_s \rightarrow J/\psi\eta$ and a search for the decay $B_s \rightarrow J/\psi\eta'$. The results are based on 23.6 fb^{-1} of data collected at the $\Upsilon(5S)$ resonance with the Belle detector at the KEKB asymmetric e^+e^- collider.

Search for $B_s \rightarrow hh$ decays

We present a study of $B_s \rightarrow hh$ decays, where h stands for charged or neutral K or π . These results are obtained from a data sample collected on the $\Upsilon(5S)$ resonance with the Belle detector at the KEKB asymmetric energy e^+e^- collider.

Measurement of $\text{cal}B(B_s \rightarrow D_s^{(*)+} D_s^{(*)-})$ and Estimate of $\Delta\Gamma_{CP}$

We report a measurement of the branching fractions for the decays $B_s \rightarrow D_s^{(*)+} D_s^{(*)-}$ using a large data sample collected at the $\Upsilon(5S)$ resonance with the Belle detector at the KEKB asymmetric energy e^+e^- collider. In the heavy quark limit, this branching fraction is directly related to the width difference between the CP -odd and CP -even B_s states.

Observation of $B_s \rightarrow D_s^{*-} \pi^+$ and $B_s \rightarrow D_s^{*-} \rho^+$ at Belle

The large data sample being recorded with the Belle detector at the $\Upsilon(5S)$ energy provides a unique opportunity to study the poorly-known B_s meson. Following our recent measurement of $B_s \rightarrow D_s \pi$ in a sample of 23.6 fb^{-1} , we extend the analysis to include decays with photons in the final state. Using the same sample, we report the first observation of three other exclusive B_s decays with large branching fractions, $B_s \rightarrow D_s^{*-} \pi^+$, $B_s \rightarrow D_s^- \rho^+$ and $B_s \rightarrow D_s^{*-} \rho^+$.

Search for Baryonic Decays of B_s

We report results from a study of B_s^0 meson baryonic decays at Belle. We search for $\bar{B}_s^0 \rightarrow \Lambda_c^+ \pi^- \bar{\Lambda}$, $\bar{B}_s^0 \rightarrow p K^- \bar{\Lambda}$, $\bar{B}_s^0 \rightarrow \Sigma_c^0 \bar{p} K^+$, and $\bar{B}_s^0 \rightarrow \Lambda_c^+ \pi^- \bar{p} K^+$ modes. The analysis is performed using a large sample of data at the $\Upsilon(5S)$ energy collected with the Belle detector at the KEKB asymmetric-energy e^+e^- collider.

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