

Measurements of lepton-flavour universality in semileptonic B decays at Belle and Belle II

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The Belle and Belle II experiments have collected a 1.1 ab^{-1} sample of $e^+e^- \rightarrow B\bar{B}$ collisions at the $\Upsilon(4S)$ resonance. These data, with low particle multiplicity, constrained initial state kinematics and excellent lepton identification, are ideal to study lepton-flavour universality in semileptonic decays of the B meson.

We present results on the ratios of semitauconic decay rates to semileptonic decays with light leptons, in both exclusive and inclusive B decays. These include new measurements of the ratios for exclusive $B \rightarrow D^{(*)}\ell\nu$ decays, $R(D^{(*)})$. We also present measurements of angular observables that test universality between electrons and muons.

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Yes

Alternate track

1. Beyond the Standard Model

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