

Searches for lepton-flavour violation at Belle and Belle II

The Belle and Belle II experiments have collected a 1.6 ab^{-1} sample of e^+e^- collision data at centre-of-mass energies near the $\Upsilon(nS)$ resonances. This sample contains approximately 1.5 billion $e^+e^- \rightarrow \tau^+\tau^-$ events, which we use to search for lepton-flavour violating decays. We present searches for $\tau \rightarrow \ell\gamma$, tau decay to three charged leptons, $\tau^- \rightarrow K_S^0\ell^-$, $\tau^- \rightarrow \ell^-\alpha$, where α is an invisible scalar particle. Further, 75% of these data are collected at a center-of-mass energy corresponding to the $\Upsilon(4S)$ resonance, which decays almost exclusively to $B\bar{B}$ pairs. We present results of several searches for non-standard-model $B \rightarrow K^{(*)}\tau\ell$ decays. Finally, we present searches for lepton-flavour-violation in bottomonium decay.

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