

## Measurements of electroweak penguin and lepton-flavour violating $B$ decays to final states with missing energy at Belle and Belle II

The Belle and Belle II experiments have collected a  $1.2 \text{ ab}^{-1}$  sample of  $e^+e^- \rightarrow B\bar{B}$  collisions at a centre-of-mass energy corresponding to the  $\Upsilon(4S)$  resonance. These data, with low particle multiplicity and constrained initial state kinematics, are an ideal environment to search for rare electroweak penguin  $B$  decays and lepton-flavour-violating  $B$  decays to final states with missing energy from neutrinos.

Results from  $b \rightarrow s\nu\bar{\nu}$  processes and their interpretation are presented. In addition, we present searches for the processes  $B \rightarrow K^{(*)}\tau^+\tau^-$ . Finally, we present our search for the lepton-flavour violating decay  $B^0 \rightarrow K^{*0}\tau^\pm\ell^\mp$ , where  $\ell$  is an electron or muon, is described.

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