

# Studies of hadron spectroscopy at Belle and Belle II

Saturday 20 July 2024 08:45 (15 minutes)

The Belle and Belle II experiments have collected a  $1.4 \text{ ab}^{-1}$  sample of  $e^+e^-$  collision data at centre-of-mass energies near the  $\Upsilon(nS)$  resonances. These data include a  $19.2 \text{ fb}^{-1}$  sample collected near the  $\Upsilon(10753)$  resonance. We present several results related to the following processes:  $e^+e^- \rightarrow \Upsilon(nS)\eta$ ,  $e^+e^- \rightarrow \gamma X_b(\chi_{bJ}\pi^+\pi^-)$ ,  $e^+e^- \rightarrow h_b(1P)\eta$  and  $e^+e^- \rightarrow \chi_{bJ}(1P)\omega$ . The last analysis also includes data samples collected by Belle at similar centre-of-mass energies. In addition, we present Belle measurements of the  $B^0$  and  $B^+$  meson mass difference, a pentaquark search in  $\Upsilon(1S)$  and  $\Upsilon(2S)$  decays, as well as studies of  $h_b(2P)$  decays to the  $\eta\Upsilon(1S)$  and  $\chi_{bJ}\gamma$  final states.

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