Contribution ID: **312** Type: **Parallel**

Measurements of time-dependent CP violation in B decay at Belle and Belle II

Monday 7 July 2025 15:00 (20 minutes)

The Belle and Belle II experiment have collected a 1.2 ab^{-1} sample of $e^+e^- \to B\bar{B}$ decays at a centre-of-mass energy corresponding to the $\Upsilon(4S)$ resonance. The SuperKEKB collider is asymmetric, providing a boost to the B mesons in the laboratory frame, so we can perform measurements of time-dependent CP violation. Among the new results, we measure CP-violating parameters related to the determination of the least well-known angle of the unitarity triangle α using the decay $B^0 \to \rho^+\rho^-$. In addition, we present a measurement of $B^0 \to K^0_S\pi^+\pi^-\gamma$, which is sensitive to beyond-the-standard-model physics.

Secondary track

Author: ROBERTSON, Steven (IPP / UofA)

Session Classification: T07

Track Classification: T07 - Flavour Physics and CP Violation