

Time-dependent CP violation measurements in radiative penguin decays of B mesons at Belle and Belle II

Tuesday 15 October 2024 14:00 (15 minutes)

The left-handed chiral structure of the W boson in the Standard Model implies that CP violation parameters measured in radiative penguin decays of B mesons should be close to zero due to the suppression of right-handed polarised photon in the final state. Hence these decays are sensitive to physics beyond the standard model through new particles in the loop that can enhance the right-handed contribution. Measurements of time-dependent CP violation parameters in these decays can thus be an excellent probe for new physics. We present the latest results from the Belle and Belle II experiments on these CP violation parameters in radiative penguin B decays.

Track type

Flavour Physics

Author: MEHTA, RISHABH

Co-author: MOHANTY, Gagan (Tata Inst. of Fundamental Research (IN))

Presenter: MEHTA, RISHABH

Session Classification: Parallel - Flavour