SUSY 2023



Contribution ID: 83 Type: Parallel talks

Recent results on B semileptonic decays from Belle and Belle II

Tuesday 18 July 2023 16:40 (20 minutes)

Precise determination of the magnitudes and phases of the elements, in particular, V_{ub} and V_{cb} , of the Cabibbo-Kobayashi-Maskawa (CKM) matrix is crucial for testing the unitarity of the CKM matrix, hence testing the Standard Model. The magnitudes of these elements are best measured by using B-meson semileptonic decays. Moreover, semileptonic B-meson decays provide a great testing ground for lepton universality of charged-current weak interaction processes. In this talk, we report recent unique and/or competitive results of inclusive and exclusive B-meson semileptonic decays, which have been measured by analyzing high-statistics data sample of $B\bar{B}$ pairs from the Belle and Belle II experiments. Some of these analyses utilize tag-side reconstruction of a companion B-meson decaying into hadronic final states, providing direct access to the signal B rest-frame and the relevant decay characteristics. The subjects we present in this talk are all relevant for either testing lepton universality or precision measurement of the CKM elements $|V_{cb}|$ and $|V_{ub}|$.

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Session Classification: Flavour physics: Theory and Experiment

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