

Lepton flavor violation of tau decays at Belle and Belle II

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Charged lepton flavor violation (cLFV) is a clear signature of physics beyond the Standard Model (SM). While cLFV is not expected to be observed in the SM, many new physics models predict reachable branching fractions of cLFV decays in the current and future experiments. The Belle II experiment, located at the SuperKEKB asymmetric-energy e^+e^- collider, is a “tau factory” and is good place to search for these rare decays. This talk will present a current status of the searches for cLFV tau decays. We will discuss the analysis techniques employed to suppress dominant backgrounds from conventional tau decays and continuum processes, including the use of advanced machine learning algorithms, and the current and future sensitivities.

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