The 29th International Workshop on Weak Interactions and Neutrinos



Contribution ID: 234 Type: Highlight talk

Charged Lepton Flavour Violation Experiments

Wednesday, 5 July 2023 11:00 (40 minutes)

The concept of lepton flavor lies at the heart of the Standard Model (SM) of elementary particle physics. However, the fundamental symmetries underlying the flavor structures remain unexplained. In the SM, the transitions between generations of charged leptons, involving charged lepton flavor violation (CLFV), are highly suppressed. Nonetheless, numerous theories beyond the SM propose significant rates of LFV processes within the reach of ongoing or proposed experiments. This review focuses on the precision frontier of exploring charged lepton flavor violation. We discuss the current status and future prospects of experimental quests for charged lepton flavor violation in the muon channel. These endeavors not only test the predictions of the SM but also provide crucial insights into new physics phenomena.

Primary author: Dr WU, Chen (Osaka University)

Presenter: Dr WU, Chen (Osaka University)Session Classification: Highlight talks 4