Phenomenology 2021 Symposium



Contribution ID: 1195

Type: Flavor

Testing Lepton Flavor Universality at the Z Pole

Tuesday, 25 May 2021 15:45 (15 minutes)

 $b \rightarrow s\tau\tau$ and $b \rightarrow c\tau\nu$ measurements are highly motivated for addressing lepton-flavor-universality-violating (LFUV) puzzles, such as $R_{D^{(*)}}, R_{J/\psi}$ and $R_{K^{(*)}}$ anomalies, raised by the data of LHCb, BELLE and BarBar. The planned operation of future e^-e^+ colliders as a Z factory provides a great opportunity to conduct such measurements, because of its relatively high production rates and reconstruction efficiency for B mesons at Z pole. In this project we will pursue a systematic sensitivity study on these measurements at future Z factories. The implications of the outcomes for LFUV new physics will be also explored.

Summary

Primary author: LI, LINGFENG (HKUST) Presenter: LI, LINGFENG (HKUST) Session Classification: Flavor III