

## Electroweak penguin B decays at Belle

Wednesday, 22 May 2019 14:20 (20 minutes)

The electroweak penguin B decay process  $b \rightarrow s l^+ l^-$  is a flavour changing neutral current process, and is sensitive to New Physics because of the possible contribution of the heavy particles in the loop. Recently, Belle and LHCb obtained interesting results, where the lepton flavor universality violation effects might be seen.

We report our new measurement of  $R(K)$  and  $R(K^*)$ , the branching ratio of  $B \rightarrow K(l^+) \mu^+ \mu^-$  to  $B \rightarrow K(l^*) e^+ e^-$ , as well as other B decay modes.

The analyses are based on the full data set recorded by the Belle detector at the  $\Upsilon(4S)$  resonance containing 772 million  $B\bar{B}$  pairs from  $e^+ e^-$  collisions produced by the KEKB collider.

**Primary author:** KWON, Youngjoon (Yonsei University)

**Presenter:** KWON, Youngjoon (Yonsei University)

**Session Classification:** BSM in Flavor Physics

**Track Classification:** BSM in Flavor Physics