

## 8th RED LHC workshop



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# LFU measurements at LHCb in semileptonic B decays

Lepton flavour universality is conserved in the Standard Model, however still nowadays, many experimental measurements of lepton flavor universality ratios exhibit a non-negligible tension with respect the theory predictions, which has a notable low uncertainty. This makes LFU measurements a gateway for the search of new physics which must be investigated to solve this tension. The LHCb measurement provides several measurements that contribute to this tension, with the newest measurement of the LFU ratios  $R(D)$  and  $R(D^*)$  using *three prong tau hadronic decays*, which will be presented in this talk. The measurement provides an independent and complementary addition to the global combination of both  $R(D)$  and  $R(D^*)$ , which could potentially accentuate this tension.

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