Contribution ID: **438** Type: **Parallel session talk**

Tests of Lepton Flavour Universality at LHCb

Friday 19 July 2024 15:15 (15 minutes)

Rare B-hadron decays mediated by $b \to s\ell^+\ell^-$ transitions provide a sensitive test of Lepton Flavour Universality (LFU), a symmetry of the Standard Model by which the coupling of the electroweak gauge bosons to leptons is flavour universal. Extensions of the SM do not necessarily preserve this symmetry and may give sizable contributions to these processes. Precise measurements of LFU ratios are, therefore, an extremely sensitive probe for New Physics, in particular given how clean the predictions for LFU observables are. Likewise, breaking of LFU can result in Lepton-Flavour violating decays of the form b->s\ell\ell'. This talks summarizes recent measurements of Lepton Flavour Universality at LHCb, as well as searches for Lepton-Flavour violating decays

Alternate track

I read the instructions above

Yes

Authors: VOS, Keri (Nikhef National institute for subatomic physics (NL)); SILVA COUTINHO, Rafael (Syracuse University (US)); WANG, Zhenzi (Université Paris-Saclay (FR))

Presenter: SILVA COUTINHO, Rafael (Syracuse University (US))

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