

Annual meeting of the Swiss Physical Society 2018



Contribution ID: 129

Type: **Talk**

[302] Lepton flavour universality tests in semileptonic b-quark decays

Wednesday, August 29, 2018 1:45 PM (15 minutes)

The Lepton Flavour Universality (LFU) anomalies are currently one of the hottest topics in the particle physics community. A combination of recent results from LHCb, Belle and BaBar from semileptonic B decays have shown a discrepancy from the Standard Model prediction of $\approx 4 \sigma$. I will review the latest lepton universality tests with semileptonic B mesons and present the prospects for an independent LFU test with baryons using semileptonic $\Lambda_b \rightarrow \Lambda_c$ decays. This test will help to corroborate the present anomalies and to provide complementary constraints on the possible origins of these anomalies beyond the Standard Model.

Primary author: Dr BUONAURA, Annarita (University of Zurich)

Presenter: Dr BUONAURA, Annarita (University of Zurich)

Session Classification: Nuclear, Particle- & Astrophysics (TASK)

Track Classification: Nuclear, Particle- and Astrophysics (TASK)