LHC Seminar

Lepton Flavour Universality tests using semitauonic decays at LHCb

by Antonio Romero Vidal (University of Santiago de Compostela (ES))

Tuesday 6 Jun 2017, 11:00 → 12:00 Europe/Zurich

503-1-001 - Council Chamber (CERN)

Description Tests of Lepton Flavour Universality are a sensitive probe for physics beyond the Standard Model (SM). Experimental tests of this feature in semitauonic b-hadron decays, such as $B \to D^* \tau\nu$, are sensitive to new particles that preferentially couple to the third generation of leptons. The world average for the ratios $\mathcal{B}(B \to D^{(*)}\tau\nu) / \mathcal{B}(B \to D^{(*)}\mu\nu)$ deviates from the very precise prediction of the SM by about 4 sigma, making this one of the most intriguing hints of potential new physics effects in the flavour sector.
The latest results on the measurement of semitauonic decays at LHCb are presented, along with future prospects.

Organised by M. Mangano, C. Lourenço, G. Unal..... **Refreshments will be served at 10h30**