

Contribution ID: 17 Type: Talk

Charged Lepton Flavour Violation searches at LHCb

Thursday 23 October 2025 15:00 (20 minutes)

Charged Lepton Flavour Violation (cLFV) is strongly suppressed in the Standard Model and therefore represents a sensitive probe for physics beyond it. Recently, the LHCb experiment has performed dedicated searches for cLFV, both in semileptonic b-hadron decays and in purely leptonic tau decays, placing competitive bounds on several decay modes. These results provide relevant constraints on a variety of new physics scenarios. With the larger dataset and upgraded detector available in Run 3, LHCb will be able to further improve the sensitivity to cLFV processes in tau decays, extending the reach in the search for possible signals of new physics.

Author: FRAU, Giulia (The University of Manchester (GB))

Co-author: VOS, Keri (Nikhef National institute for subatomic physics (NL))

Presenter: FRAU, Giulia (The University of Manchester (GB))

Session Classification: Plenary session

Track Classification: LFV & BSM