



Contribution ID: 118

Type: Talk

## **[315] Search for the lepton flavour violating $B_0 \rightarrow e^\pm \mu^\mp$ and $B_0 \rightarrow e^\pm \mu^\mp$ decays with LHCb Run 2 data**

*Tuesday 28 June 2022 14:00 (15 minutes)*

Recent hints of lepton flavour universality violation in b-hadron decays suggest that the rates for lepton flavour violating decays may be much higher than predicted in the Standard Model.

With its large number of recorded b-hadron decays, the LHCb experiment is ideally suited for the searches for lepton flavour violation due to its large acceptance, high trigger efficiency and excellent tracking and particle identification capabilities.

In this talk, the analysis strategy and status for the search for the lepton flavour violating decays of  $B_0 \rightarrow e^\pm \mu^\mp$  and  $B_0 \rightarrow e^\pm \mu^\mp$  using Run 2 data collected by the LHCb experiment will be presented.

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**Session Classification:** Nuclear, Particle- & Astrophysics

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