



Laboratoire LEPRINCE-RINGUET  
Ecole polytechnique IN2P3/CNRS

# Séminaire

## Lepton Flavour Universality tests using semitauonic decays at LHCb

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  $B \rightarrow D^* \tau \nu$ , are sensitive to new particles that preferentially couple to the third generation of leptons. The world average for the ratios  $B(B \rightarrow D^* \tau \nu)/B(B \rightarrow D^* \mu \nu)$  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.

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Salle conférence du  
LLR

**Lundi 11  
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14h00**

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Responsables séminaires

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