TRIESTE - IFAE 2017

Contribution ID: **186** Type: **Oral contribution**

Search for new physics with b -> s l+ l- decays at LHCb

Thursday, 20 April 2017 15:00 (20 minutes)

The family of decays mediated by $b \to sl^+l^-$ transitions provides a rich laboratory to search for effects of physics beyond the Standard Model. In recent years LHCb has found hints of deviations from theoretical predictions both in the rates and angular distributions of such processes. In addition, hints of lepton flavour non-universality have been seen when comparing $B^+ \to K^+\mu^+\mu^-$ and $B^+ \to K^+e^+e^-$ decay rates, with the so-called R_K ratio. Similar observables in different decays, such as $R_{K*} = BR(B^0 \to K*\mu^+\mu^-)/BR(B^0 \to K*e^+e^-)$ and others, can also be measured by LHCb, thus providing further avenues to test the effectiveness of lepton flavour universality. The latest results from LHCb in this sector will be presented.

Primary author: Mr BIFANI, Simone (University of Birmingham)

Presenter: Mr BIFANI, Simone (University of Birmingham)

Session Classification: Sessione Frontiera Intensita'

Track Classification: Sessione Frontiera Intensità