

# Summer Institute 2019: Flavour anomalies in B decays, light dark matter from hidden sectors and lepton dipole moments

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## Update on b to s anomalies after Moriond 2019

*Monday, 24 June 2019 14:30 (1 hour)*

Flavour Changing Neutral Currents (FCNC) are an excellent probe for the search of New Physics. Therefore, LHCb has put a particular care in the study of B decays mediated by FCNC starting from Run I and with more data being presently acquired during Run II. Tensions between present data and Standard Model predictions have been found in some of these channels, hinting at a possible violation of Lepton Flavour Universality. I will review the status of these tensions after the latest result presented at Moriond 2019, assessing with particular care the theoretical cleanliness of the observables displaying such tensions. Then, I'll discuss the possible explanations for such a pattern of anomalies both within and beyond the Standard Model, employing a model independent EFT framework. Finally, I'll review a possible loop model capable to address such anomalies.

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