Hadronic Contributions to New Physics Searches 2019



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EFT interpretation of the B anomalies

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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. 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 cleanness 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. I will do so employing a model independent EFT framework, and focusing in particular on how a different handling of hadronic uncertainties might yield to different NP interpretations of these anomalies.

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