



Contribution ID: 4

Type: **not specified**

LHCb. anomalies, power corrections to inclusive modes and refactorisation

Tuesday 18 June 2024 10:00 (20 minutes)

The present LHCb anomalies in the post- R_K^* era are obscured by still unknown power corrections to these exclusive modes. The method of refactorization is an option to solve this problem in the long run. We present a successful example of these new techniques in SCET within the power corrections to the inclusive $\bar{B} \rightarrow X_s \gamma$ decay. Another option is the crosscheck with the corresponding inclusive modes at BELLE-II. The uncertainties due to the nonlocal so-called resolved contributions are still among the largest ones of these modes. We discuss the α_s corrections to these contributions in SCET which will reduce their large scale and large charm mass dependence and will significantly increase the new physics sensitivity of the inclusive penguin modes.

Primary author: HURTH, Tobias (Johannes Gutenberg University Mainz)

Presenter: HURTH, Tobias (Johannes Gutenberg University Mainz)

Session Classification: Day 1