



Contribution ID: 14

Type: Long talk (20 mins)

## Flavour symmetries and Standard Model tests in B- $\rightarrow$ DD decays

*Friday, December 16, 2022 1:30 PM (30 minutes)*

The discrepancy between the Baryon Asymmetry of the Universe and its Standard Model (SM) prediction implies the existence of physics beyond the SM, which must include further sources of CP violation. Generically, physics beyond the SM comes with O(1) weak phases. LHCb has recently made several CP asymmetry measurements for B- $\rightarrow$ DD decays. For such non-leptonic modes, a lack of knowledge of long-distance strong interaction contributions means these are challenging to predict. We use QCD's approximate SU(3)-flavour symmetry, systematically including breaking effects, to assess the consistency of current data with the SM and to predict yet unmeasured CP asymmetries.

### Type of presentation

20 minute talk

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**Primary author:** DAVIES, Jonathan (University of Manchester (GB))

**Presenter:** DAVIES, Jonathan (University of Manchester (GB))

**Session Classification:** Full Length Talks