

Tests of new-physics explanations of $a_{CP}(D \rightarrow \pi\pi)$ and $a_{CP}(D \rightarrow KK)$

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The LHCb combined measurements of $\Delta a_{CP} = a_{CP}(D \rightarrow K^+K^-) - a_{CP}(D \rightarrow \pi^+\pi^-)$ and $a_{CP}(D \rightarrow K^+K^-)$ are in tension with predictions employing the Standard Model and U-spin symmetry of QCD. I discuss explanations in terms of new physics and propose test of these explanations in other D decay modes.

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