

Study of $B^{+-} \rightarrow D^0(K^{\pm}\pi^{\mp})K^{\pm}$ Dalitz decays and Sensitivity to γ in LHCb

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A measurement of the CP angle γ at the tree-level is one of the principal goals of LHCb and provides a benchmark for any New Physics. One of the most precise direct determinations of γ comes from the amplitude analysis of the Dalitz plots in $B^{+-} \rightarrow (D^0/D^0\text{-bar})K^{\pm}$ decays, where the $D^0/D^0\text{-bar}$ decays to $K^{\pm}\pi^{\mp}$. This has been demonstrated at the B-factory experiments and will be a key measurement at the LHC with the first few years of data. This presentation will cover the expected event yields and backgrounds at LHCb with the first few years of data and provide an estimate of the sensitivity to γ .

Talk, Poster, or Talk & Poster

Talk

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