



HEP 2013
Stockholm
18-24 July 2013



Contribution ID: 570

Type: **Talk presentation**

Measurement of γ from three-body B decays

Thursday 18 July 2013 16:45 (15 minutes)

It was recently shown that the weak phase γ can be extracted from three-body B decays. Using a flavor-SU(3)-symmetric approach, we extract γ from the BaBar measurements of the Dalitz plots of $B \rightarrow K\pi\pi$ and $B \rightarrow KK\bar{K}$ decays. We find four possible solutions: 31^{+2}_{-3} , 77 ± 3 , 258^{+4}_{-3} and 315^{+3}_{-2} , in degrees. In all cases the error includes first-order flavor-SU(3) breaking effects. One solution -77 ± 3 is consistent with the standard model; its error is smaller than that obtained using two-body B decays. We present recent updates of the results.

Primary author: IMBEAULT, Maxime (Cégep de Saint-Laurent)

Co-authors: BHATTACHARYA, Bhuvanajyoti (University of Montreal); LONDON, David (Universite de Montreal)

Presenter: IMBEAULT, Maxime (Cégep de Saint-Laurent)

Session Classification: Flavour Physics and fundamental symmetries

Track Classification: Flavour Physics and Fundamental Symmetries