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**Combined measurement of CP violating angle  $\beta$  by the BaBar and Belle experiments** CHUNHUI CHEN, Iowa State Univ, BABAR COLLABORATION COLLABORATION, BELLE COLLABORATION COLLABORATION — We present a recent joint measurement of CP violating angle  $\beta$  using 1.1 inverse attobarn data collected by BaBar and Belle experiments. This analysis is based on a time-dependent Dalitz plot analysis of  $B \rightarrow^{(*)} h^0$  with  $D \rightarrow K_S^0 \pi^+ \pi^-$  decays. These decays provide an experimental access to  $\cos 2\beta$  in addition to  $\sin(2\beta)$ , and can therefore resolve an ambiguity in the determination of the apex of the CKM Unitarity Triangle. As part of the analysis, a full Dalitz plot amplitude analysis of  $D \rightarrow K_S^0 \pi^+ \pi^-$  is performed on a high-statistics charm data set. The first evidence for  $\cos 2\beta > 0$ , an observation of CP violation, and the exclusion of the second solution of the CKM Unitarity Triangle of  $\beta = (68.1 + -0.7)^\circ$  at a significance of 7.3 standard deviations are reported.

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