Abstract Submitted
for the APR05 Meeting of
The American Physical Society

A study of $B^0 \to \overline{D}^0(D^0)K^+\pi^-$ decays CHIH-HSIANG CHENG, Lawrence Livermore National Lab, BABAR COLLABORATION — We present a study of $B^0 \to \overline{D}^0 K^+\pi^-$ and $B^0 \to D^0 K^+\pi^-$ decays using a sample of 226 million $B\overline{B}$ pairs collected by the BaBar detector at the PEP-II asymmetric energy e^+e^- collider. These two decays are through $b \to c$ and $b \to u$ diagrams respectively. If large decay amplitude overlap on the Dalitz plot is observed, one could improve the constraint on the CKM angle γ. In this analysis, we measure the branching ration of $B^0 \to \overline{D}^0 K^+\pi^-$ outside the dominant $B^0 \to D^{*-}K^+$ resonance, and the upper limit of the branching ratio of $B^0 \to D^0 K^+\pi^-$.

Christopher Hearty
University of British Columbia

Date submitted: 07 Jan 2005 Electronic form version 1.4