## Abstract Submitted for the APR05 Meeting of The American Physical Society

Branching ratio and decay asymmetry measurement of  $B^- \to D^0 K^-$  with  $D^0 \to \pi\pi\pi^0$  QINGLIN ZENG, Colorado State University, BABAR COLLABORATION — We report on the observation of the decay  $B^0 \to D^0/\bar{D^0} K^-$  with  $D^0/\bar{D^0} \to \pi\pi\pi^0$ . Using data collected by BaBar with an integrated luminosity of about 203  $fb^{-1}$ , we measure the branching fraction of this decay chain and its decay rate asymmetry. This mode can be used to measure the weak phase gamma through the interferences between the  $b \to u\bar{c}d$  and  $b \to c\bar{u}d$  decays.

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