

Abstract Submitted
for the APR06 Meeting of
The American Physical Society

Study of the $B^\pm \rightarrow (K\pi\pi^0)_{D^0/\overline{D^0}}K^\pm$ through the ADS method VI-
OLA SORDINI, LAL-Orsay and University of Roma, La Sapienza, BABAR COL-
LABORATION — We report on our study of B^\pm mesons decaying into the fi-
nal states $K^+\pi^-\pi^0K^\pm$ and $K^-\pi^+\pi^0K^\pm$, where $K\pi\pi^0$ come from a D^0 or $\overline{D^0}$
meson, using 205 fb^{-1} of data collected by the BaBar detector at the PEP-
II asymmetric-energy $e^+e^- B$ Factory at SLAC. We aim to measure the ratio
 $R_{ADS} = \frac{\mathcal{BR}(B^+ \rightarrow \mathcal{K}^- \pi^+ \pi' \mathcal{K}^+) + \mathcal{BR}(B^- \rightarrow \mathcal{K}^+ \pi^- \pi' \mathcal{K}^-)}{\mathcal{BR}(B^+ \rightarrow \mathcal{K}^+ \pi^- \pi' \mathcal{K}^+) + \mathcal{BR}(B^- \rightarrow \mathcal{K}^- \pi^+ \pi' \mathcal{K}^-)}$, from which we can extract infor-
mation on the parameter $r_B = \frac{A(B^+ \rightarrow D^0 K^+)}{A(B^+ \rightarrow \overline{D^0} K^+)}$. Since r_B is the ratio between a V_{ub}
and the V_{cb} decay amplitude, it's knowledge corresponds to a constraint on ρ - η plane
in the γ sector.

James Olsen
Princeton University

Date submitted: 05 Jan 2006

Electronic form version 1.4