Study of the $B^\pm \rightarrow (K\pi\pi^0)_{D^0/\bar{D}^0}K^\pm$ through the ADS method VI-OLA SORDINI, LAL-Orsay and University of Roma, La Sapienza, BABAR COLLABORATION — We report on our study of $B^\pm$ mesons decaying into the final states $K^+\pi^-\pi^0K^\pm$ and $K^-\pi^+\pi^0K^\pm$, where $K\pi\pi^0$ come from a $D^0$ or $\bar{D}^0$ 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 $R_{ADS} = \frac{BR(B^+\rightarrow K^+\pi^-\pi^0K^+)+BR(B^0\rightarrow K^+\pi^-\pi^0K^-)}{BR(B^+\rightarrow K^-\pi^+\pi^0K^-)+BR(B^0\rightarrow K^-\pi^+\pi^0K^+)}$, from which we can extract information on the parameter $r_B = \frac{A(B^+\rightarrow D^0K^+)}{A(B^+\rightarrow D^0K^-)}$. Since $r_B$ is the ratio between a $V_{ub}$ and the $V_{cb}$ decay amplitude, it’s knowledge corresponds to a constraint on $\rho-\eta$ plane in the $\gamma$ sector.

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