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Measurement of $\bar{B}^0 \to D^{(*)+}\pi^-$ and $B^- \to D^{(*)0}\pi^-$ decays HAIWEN ZHAO, University of Mississippi, BABAR COLLABORATION — We present new measurements of branching fractions for the color-favored decays $\bar{B}^0 \to D^{(*)+}\pi^-$ and $B^- \to D^{(*)0}\pi^-$. Using a data set of integrated luminosity of $59.0\,\mathrm{fb}^{-1}$ taken with BaBar detector at the $\Upsilon(4S)$ resonance, we measured the branching fractions for these decays and obtained the strong phase difference between the I=1/2 and I=3/2 isospin amplitudes. The result suggests the presence of final state interactions in the $D^{(*)}\pi$ system.

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