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Search for the Doubly-Cabibbo Suppressed Decay $D^+ \to K^+\pi^0$ DIRK HUFNAGEL, Ohio State University, BABAR COLLABORATION — Hadronic decays of charged D mesons are an important tool to study the dynamics of heavy quark decays. These measurements can provide insights into the violation of the SU(3) flavor symmetry and isospin symmetry. Observing the doubly Cabbibo-suppressed decay of a D+ meson into a positive kaon and a neutral pion will be valuable for mixing studies in the neutral D meson system as they will shed a light on the size of the SU(3) flavor violating effects in D meson decays. Using the large sample of charm decays collected with the BaBar detector at the Stanford Linear Accelerator Center we have searched for these rare decays. Status of the analysis and first results will be presented.

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