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Searching for $D^0 \to K^-\pi^+\eta^0$ in Belle Data¹ YASIEL CABRERA, DAVID CINABRO, SUDESHNA GANGULY, Wayne State University, BELLE I COLLABORATION² — We describe the reconstruction of the CP- decay mode $D^0 \to K^-\pi^+\eta^0$ in the Belle I data set. Using a set of simulated signal and a generic simulated sample equal in size to the Belle I data set, we reconstructed 826 events from an initial sample of 18,900 simulated events for an efficiency of 4.4%. We studied backgrounds in the generic simulated sample, and checked in the real data. We found, in agreement with the simulations, no obvious signal in the Belle I data indicating that further work has to go into suppressing the background.

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