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Search for D^0 - \bar{D}^0 mixing and CP violation JORDI GARRA TICO, Univ. de Barcelona, BABAR COLLABORATION — Experimental results of charm mixing and CP violation searches in the BABAR experiment at the PEP-II e^+e^- asymmetric-energy collider at SLAC will be presented. Though evidence of CP violation in the D^0 decay, mixing or interference has never been found, compelling evidence for mixing in the D^0 sector has been found in $D^0 \to K^+\pi^-$ and $D^0 \to K^+K^-,\pi^+\pi^-$ events. The talk will focus on time dependent analyses of two and three body D meson decays, which provide the opportunity to measure the mixing parameters x and y directly.

J. Michael Roney Univ. of Victoria

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