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Measurement of $\bar{B}^0 \to \pi^+\ell^-\bar{\nu}$ on the recoil of partially reconstructed B^0 decays ALESSANDRO GAZ, INFN Padova, BABAR COLLABORATION — We present a measurement of the branching fraction $\bar{B}^0 \to \pi^+\ell^-\bar{\nu}_\ell$ and of $|V_{ub}|$ from a sample of $\Upsilon(4S) \to B\bar{B}$ decays collected by the BaBar detector at the asymmetric e^+e^- collider PEP-II. We search for events compatible with $\bar{B}^0 \to \pi^+\ell^-\bar{\nu}_\ell$ decay inside an enriched $\bar{B}^0B^0$ sample selected using partial reconstruction of the decay $B^0 \to D^{*-}\ell^+\nu_\ell$. With this technique, we can perform softer cuts on pion and lepton momenta, as compared to untagged analyses, and therefore obtain a smaller systematic error due to the cut on the phase-space.

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