Isospin Violation Measurement at the Upsilon(4S) Resonance

ROMULUS GODANG, GEORGE BASSETT, University of South Alabama, BABAR COLLABORATION — Isospin violation at the Upsilon(4S) resonance is an important input for many B meson measurements at B Factories. It may be at the level of a few percent mostly due to electromagnetic interactions and the mass difference of the up and the down quarks. We partially reconstruct neutral B meson in the semileptonic decay of $\bar{B}^- \rightarrow D^*-\bar{\nu}e$ and $\bar{B}^0 \rightarrow D^0\nu\bar{\nu}$. We discuss a model independent measurement of the branching fraction of Upsilon(4S) decays to neutral BB pairs based on a data sample of 470 million BB pairs collected at the Upsilon(4S) resonance with the BABAR detector at SLAC.

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