

Abstract Submitted
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Searching for Isospin Violation at the Upsilon(4S) at BABAR¹

ROMULUS GODANG, University of South Alabama, LUCIEN CREMALDI, DON SUMMERS, University of Mississippi — Isospin violation at the Upsilon(4S) resonance is an important input for many B meson measurements at B factories. Isospin violation at Upsilon(4S) resonance 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. In this paper, we reconstruct neutral B meson in the channel $D^* \text{ Lepton Neutrino}$ using a partial reconstruction method. Based on a data sample of 514 million B pairs collected at the Upsilon(4S) resonance with the BABAR detector at the PEP-II asymmetric-energy B Factory at SLAC, we discuss a model independent measurement of the branching fraction of Upsilon(4S) decays to neutral B pairs.

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