Abstract Submitted for the APR11 Meeting of The American Physical Society

Measurement of the branching fraction of $\Upsilon(4S) \to B^0 \bar{B}^0$ at BABAR¹ ROMULUS GODANG, University of South Alabama, BABAR COLLAB-ORATION — Based on a data sample of 476 million $B\bar{B}$ pairs collected at the $\Upsilon(4S)$ resonance with the BABAR detector at the PEP-II asymmetric-energy *B*-Factory at the SLAC National Accelerator Laboratory, we conduct a direct, model-independent measurement of the branching fraction of the $\Upsilon(4S)$ decay to a $B^0\bar{B}^0$ pair. The *B* mesons are partially reconstructed in the decay $\bar{B}^0 \to D^{*+}\ell^-\bar{\nu}_{\ell}$. This measurement is important for normalizing many *B*-decay branching fractions.

 $^1{\rm This}$ work was supported by the U.S. Department of Energy under grant No. DE-FG02-96ER-40970.

Abner Soffer Tel Aviv University

Date submitted: 07 Jan 2011

Electronic form version 1.4