

Abstract Submitted  
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**Measurement of the Branching Fraction of  $B_0\text{bar} \rightarrow D^{*+} \text{Lepton Neutrino}$** <sup>1</sup> CHRISTOPHER BUCHANAN<sup>2</sup>, SHANNON EYNON, ROMULUS GODANG, University of South Alabama — We present a measurement of the branching fraction of semileptonic anti- $B_0$  meson decays to  $D^{*+}$  meson, lepton, and anti-neutrino using 476 million B-meson anti-B-meson pairs. The data sample collected with the BABAR detector at the PEP-II asymmetric-energy B-Factory at SLAC National Accelerator Laboratory. The anti- $B_0$  mesons are reconstructed using a novel technique, partial reconstruction, where the  $D_0$  mesons are not reconstructed. The  $D^{*+}$  mesons are detected only through the soft pion daughter from the decay  $D^{*+} \rightarrow D_0 \pi^+$ . We use a single and double tag method to measure the semileptonic branching fraction. This precise measurement plays a prominent role in high energy physics particularly in heavy flavor physics.

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