## Abstract Submitted for the APR11 Meeting of The American Physical Society

Search for the lepton-flavor-violating decays  $B^\pm \to h^\pm \tau \ell$  ( $h = K, \pi; \ell = e, \mu$ ) at BABAR GIL M. VITUG, OWEN R. LONG, University of California, Riverside, BABAR COLLABORATION — We present a search for the lepton-flavor-violating decays  $B^\pm \to h^\pm \tau \ell$  ( $h = K, \pi; \ \ell = e, \mu$ ) using the full BABAR dataset, which corresponds to 471.9 million  $B\bar{B}$  pairs. The search uses a sample of events where one B meson (the "tag" B) is fully reconstructed in one of several hadronic final states. Using the tag-B momentum and the reconstructed h and h, we are able to fully reconstruct the h-momentum. The reconstructed h-mass is our main discriminant against combinatoric background.

Abner Soffer Tel Aviv University

Date submitted: 10 Jan 2011 Electronic form version 1.4