Abstract Submitted
for the APR09 Meeting of
The American Physical Society

Measurement of Branching Fractions in $B \to K\nu\bar{\nu}$ Decays CARL VUOSALO, University of Wisconsin, Madison, BABAR COLLABORATION — Flavor changing neutral-current transitions such as $b \to s\gamma$ are absent at tree level in the Standard Model and can only occur via loop diagrams. Several new physics models may enhance the rate of these transitions. We will present searches for the exclusive decays $B^{\pm} \to K^{+}\nu\bar{\nu}$ and $B^{0} \to K_{s}\nu\bar{\nu}$. Due to the presence of two neutrinos in the final state, we require the full reconstruction of one B-meson in the semileptonic decay channel $B^{\pm} \to D^{(*)0}\ell\nu$ and search in the recoil for our decay modes. This analysis uses approximately 430 fb^{-1} or 470 million $B\bar{B}$ pairs collected with the BAB AR detector at the PEP-II B-factory.

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Date submitted: 08 Jan 2009 Electronic form version 1.4