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**Search for baryon- and lepton-number violation in $B$ decays using the BABAR dataset** MATTHEW BELLIS, Stanford University, BABAR COLLABORATION — A search for the decay of a $B$ meson into a baryon and a lepton is performed, where the baryon is either a $\Lambda_c^+$ or a $\Lambda$, and the lepton is a muon or an electron. These decays violate both baryon and lepton number. This is the first search for these processes, and observation of a signal would indicate physics beyond the standard model. The search uses $(471 \pm 1) \times 10^6$ $B\bar{B}$ pairs produced by the PEP-II $e^+e^-$ storage ring and collected by the BABAR detector at the SLAC National Accelerator Laboratory. The search is performed using a blind analysis. No significant signal is observed in any of the decay modes, and upper limits are set on the various branching fractions at the 90% confidence level.

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