

Abstract Submitted  
for the HAW05 Meeting of  
The American Physical Society

**The excess of positive charged particles measured at forward rapidities in d+Au collisions and baryon transport** RAMIRO DEBBE, Brookhaven National Laboratory, BRAHMS COLLABORATION — The difference between positive and negative hadronic yields, measured by BRAHMS in d+Au at  $\eta = 3.2$  (1), has been identified as a challenge to partonic descriptions based on pQCD (2). Within such descriptions, the hadronic yields are dominated by pion production, and isospin conservation fixes the abundance of positive and negative pions to be roughly equal. The measured difference was found to be due to a high number of protons up to the highest pt measured (3). To shed additional light on this subject, we studied baryon transport in d+Au by extracting net-proton distributions in eta. A net-proton excess at  $\eta = 3.2$  identifies the higher yield of positive particles as “beam fragments.” Comparisons to theory are done to elucidate the mechanism that gave these baryons such high pt.

(1) R. Debbe for the BRAHMS Collaboration J. Phys. G: Nucl. Part. Phys. **30** S759-S765 (2004).

(2) V. Guzey, M. Strikman, W. Vogelsang, Phys. Lett. D **603**, 173 (2004).

(3) R. Debbe for the BRAHMS Collaboration ICPAQGP 2005, nucl-ex/ 0504015.

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Date submitted: 26 May 2005

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