

Abstract Submitted
for the APR05 Meeting of
The American Physical Society

Jet Properties from Di-hadron Azimuthal Correlations in d+Au Collision NATHAN GRAU, Iowa State University, PHENIX COLLABORATION — Results from the different RHIC experiments reveal an enhancement of the high- p_T single particle spectra from $d + Au$ collisions as compared to $p + p$ collisions. This enhancement is usually attributed to multiple scattering of the projectile parton in the target nucleus prior to the hard collision. Multiple scattering will also affect the acoplanarity of di-jets produced in these collisions, which is measured as an increase in k_T , the parton transverse momentum. In this talk we present high- p_T azimuthal correlations using di-hadrons to identify di-jets in PHENIX. We present final results on the measurement of k_T from these correlations and present the centrality dependence. These results are compared to results from $p + p$ collisions to establish the increase in k_T due to the cold nuclear medium. We compare the results to theoretical models that reproduce the single particle spectra from $d + Au$ collisions. These results serve as a baseline for modifications of jet structure in $Au + Au$ collisions.

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Date submitted: 14 Jan 2005

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