## Abstract Submitted for the APR10 Meeting of The American Physical Society

Status of Neutral Dijet Analysis on Data from 200GeV Proton Proton Collisions Using the STAR Detector at RHIC B.S. PAGE, Indiana University, STAR COLLABORATION — In the past, STAR has probed the gluon distribution  $\Delta g(x)$  of the proton using inclusive measurements, which integrate over a broad range of Bjorken x. To date, these measurements have been able to place a strong constraint on the partial integral of  $\Delta g(x)$  in the x range 0.03 to 0.3, however, they have little sensitivity to the shape of  $\Delta q(x)$  as a function of x. Dijet measurements on the other hand provide direct access to parton-level kinematics at leading order and thus allow for the investigation of the shape of  $\Delta q(x)$ . The study of dijets at forward rapidity in STAR is complicated by the falling charged particle tracking efficiency of the Time Projection Chamber for  $|\eta| > 1$ . Therefore, to access the lower x region found at forward rapidity, it will be necessary to study jets detected only by their neutral component which can be observed by the STAR Endcap Electromagnetic Calorimeter for  $1 < \eta < 2$ . Investigations into the impact of lost tracking information on the reconstruction of partonic kinematics, as well as analysis of 2009 data are under way. The current status of these studies will be presented.

> Brian Page Indiana University

Date submitted: 23 Oct 2009

Electronic form version 1.4