

Abstract Submitted
for the DNP10 Meeting of
The American Physical Society

Toward a Dijet Measurement at Forward Rapidity Utilizing the STAR Endcap Electromagnetic Calorimeter B.S. PAGE, Indiana University, STAR COLLABORATION — To date, the STAR experiment at the Relativistic Heavy Ion Collider has probed the gluon helicity distribution of the proton, $\Delta g(x)$, primarily through inclusive channels. These inclusive measurements have resulted in a strong constraint on the integral of $\Delta g(x)$ over the Bjorken- x range of 0.03 to 0.3; however, they have little sensitivity to the the shape of $\Delta g(x)$ as a function of x . In contrast, dijet measurements give sensitivity to partonic kinematics and thus allow for the investigation of the x dependence of $\Delta g(x)$. The study of dijets at forward rapidity in STAR is complicated by the falling charged particle tracking efficiency of the Time Projection Chamber for $|\eta| > 1$, as well as a gap in electromagnetic calorimeter coverage for $1.0 < \eta < 1.086$. To study dijets at forward rapidity, and thus gain access to lower partonic x values, it will therefore be necessary to have a detailed understanding of systematic changes in reconstructed jet properties as one moves into the Endcap region ($1.086 < \eta < 2$). The status of studies investigating these systematic changes will be presented.

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Date submitted: 28 Jun 2010

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