

Abstract Submitted
for the DNP06 Meeting of
The American Physical Society

Di-final state measurements to constrain event kinematics in longitudinally polarized p+p collisions at STAR TAI SAKUMA, MIT, STAR COLLABORATION — A primary motivation of the RHIC spin program is the extraction of the gluon helicity distribution (ΔG) from polarized p+p collisions. Initial studies have focused on measurements of inclusive final states, such as pions and jets. Steady improvements in RHIC integrated luminosity and polarization open more exclusive final states such as di-jets and di-hadrons, allowing tighter constraints on initial state parton kinematics. With its large acceptance electromagnetic calorimetry and tracking, STAR is particularly well suited for this measurement. We report progress towards measurement of di-jet and di-hadron final state A_{LL} extracted from ~ 6 pb $^{-1}$ of polarized p+p collisions at 200 GeV. In particular, we focus on data vs MC comparisons that provide insight into the level of constraint of the event kinematics.

Tai Sakuma
MIT

Date submitted: 06 Jul 2006

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