

Abstract Submitted
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Inclusive Jet Production in Longitudinally Polarized pp Collisions at STAR ZILONG CHANG, Texas A&M University, STAR COLLABORATION — Gluon-gluon and quark-gluon scattering dominate jet production in longitudinally polarized proton-proton collisions at RHIC. The inclusive jet double-helicity asymmetry, A_{LL} , measured by STAR places significant constraints on gluon polarization in the proton. The preliminary results of inclusive jet A_{LL} at $\sqrt{s} = 200$ GeV collected during the 2009 RHIC run show the first experimental evidence of non-zero gluon polarization over the Bjorken- x range, $0.05 < x < 0.2$, sampled at RHIC. Furthermore, data collected at $\sqrt{s} = 510$ GeV during the 2012 RHIC run allow access to the gluon polarization at lower x . In this talk, I will present the results of the 2009 inclusive jet A_{LL} at 200 GeV and discuss the current status of the analysis of the 2012 inclusive jet A_{LL} at 510 GeV.

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