



Nuclear Experiment

Gluon polarization measurements with inclusive jets at STAR

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At RHIC kinematics, polarized jet hadroproduction is dominated by gg and qg scattering, making the jet double longitudinal spin asymmetry, A_{LL} , sensitive to gluon polarization in the nucleon. I will present STAR results of A_{LL} from inclusive jet measurements for the RHIC 2006 run at center-of-mass energy 200 GeV. I will also discuss the current status of the analysis of data from the 2009 run, also at center-of-mass energy 200 GeV. The results are compared with theoretical calculations of A_{LL} based on various models of the gluon density in the nucleon. The STAR data place significant constraints on allowed theoretical models.

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