

Longitudinal Double Spin Asymmetry in Jets in $\sqrt{s} = 510$ polarized p+p

The longitudinal double-spin asymmetry (A_{LL}) in spin-polarized $p+p$ collisions provides insight into the gluon contribution to the proton's spin by accessing the gluon helicity distribution Δg . The PHENIX π^0 and STAR jet A_{LL} measurements show non-zero asymmetries and hence indicate a non-zero Δg in an NLO analysis. The STAR measurements of jet A_{LL} in $\sqrt{s} = 200$ and 510 GeV polarized p+p collisions provide the strongest constraints on Δg at intermediate to high x . Using new jet reconstruction techniques developed for the PHENIX detector, a measurement of the jet A_{LL} at $\sqrt{s} = 510$ GeV in PHENIX will provide an important cross check on the results from STAR. In this poster I will highlight the progress of this analysis effort in PHENIX.