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Recent Spin Results at PHENIX

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There have been numerous results in both longitudinal and transverse spin at PHENIX. The longitudinal double spin asymmetry (A_{LL}) provides insight into the gluon helicity distribution function (ΔG), the contribution of gluon spin to the proton. The A_{LL} of direct photons, jets, and charged pions in polarized pp collisions at $\sqrt{s} = 510$ GeV have been measured, which are novel PHENIX results. The transverse single spin asymmetry (A_N) elucidates the transverse momentum dependent (TMD) distributions and fragmentation functions and their higher twist counterparts. A_N for π^0 , η , charged pion, open heavy flavor electrons, and direct photons at midrapidity in polarized pp $\sqrt{s} = 200$ GeV have been measured at PHENIX. In addition, the neutron A_N at very forward rapidity has been measured in pA with the explicit pT and xT dependence which will provide more information about the underlying mechanisms that create the asymmetries. This talk will discuss these recent PHENIX results.

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