

# Transverse Spin Physics at PHENIX

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In the past decade, the data from transverse spin p+p from the Relativistic Heavy Ion Collider at Brookhaven National Laboratory and polarized DIS experiments have enabled enormous progress in our understanding of the transverse spin dynamics in the proton. PHENIX Collaboration has carried out a very active program of transverse spin measurements, including transverse spin asymmetries (TSSAs) in the production of light/heavy quark, of leading neutrons at forward rapidity, and of di-hadron/jet spin correlations in a wide kinematic range. All of these are crucial toward solving the transverse spin puzzle by disentangling the Sivers, the Collins and other spin effects. In the next two years we plan to collect new data on transversely polarized p+p and p+A with high luminosities. In this talk, I will summarize the recent results from the PHENIX experiment, and discuss the near-term prospects of new physics measurements enabled by the newly installed silicon vertex tracker (FVTX) and the MPC-EX detectors currently under construction.

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