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PHENIX Transverse Spin Physics Results

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Utilizing the RHIC polarized proton collider with transverse spin the PHENIX detector carried out cross section and asymmetry measurements in inclusive pizero and eta production at mid rapidity |n| < 0.35 using the central EM calorimeters where vanishing asymmetries were found. However, significant pizero and eta asymmetries were measured in the forward rapidity 3.1 < n < 3.9 using the MPC calorimeter. An inclusive cluster analysis of the MPC data also resulted in significant asymmetries. We will discuss the results in terms of energy dependence, the Sivers or Collins contributions at low transverse momentum, and higher Twist approaches at higher momenta. Future plans such as a inclusive jet production and Drell Yan measurements will also be presented.

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