

Abstract Submitted
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Measurement of the Eta Meson Transverse Single Spin Asymmetry A_N at large Feynman X_F with the STAR Forward Pion Detector.¹

LEN EUN, Pennsylvania State University, STAR COLLABORATION — The large values of the Transverse Single Spin Asymmetry, A_N , seen in forward π^0 production from polarized proton collisions have stimulated important questions and have been studied in many QCD based transverse spin models. We report the first measurement of A_N for forward Eta meson production. Eta mesons of energy greater than 50 GeV ($X_F > 0.5$) were observed in the STAR Forward Pion Detectors, along with π^0 mesons, at pseudorapidity of 3.65 in $\sqrt{s} = 200$ GeV pp collisions. The π^0 transverse asymmetry, which has already been reported in detail by the STAR collaboration, is compared to the Eta transverse asymmetry. The current analysis suggests that in this kinematic region, the Eta asymmetry is larger than the already large π^0 asymmetry.

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