

Abstract Submitted
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Forward Single Spin Asymmetries in Transversely Polarized Proton Collisions at STAR YUXI PAN, University of California, Los Angeles, STAR COLLABORATION — In transversely polarized proton collisions, single spin asymmetries of particle production at forward rapidity are known to be sensitive to the polarized quark degrees of freedom. Large asymmetries for π^0 mesons in the region $0 < x_F < 0.5$ observed at energies up to $\sqrt{s} = 200$ GeV continue to attract theoretical attention due to speculation about their exact origins, and subsequent predictions for different proposed mechanisms. Recently STAR has taken approximately $28pb^{-1}$ of transversely polarized proton collision data at $\sqrt{s} = 500$ GeV with an average polarization in excess of 45%. Neutral mesons, single photons and jets were observed in the Forward Meson Spectrometer for the rapidity range $2.5 < \eta < 4$. We present an update on the analysis for π^0 and η mesons for this data, especially the prospects of extending the transverse momentum and x_F range of the previous measurements.

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