

Abstract Submitted
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Dependence of Forward π^0 Transverse Single Spin Asymmetries on Roman Pot Triggers from $\sqrt{s} = 200$ GeV pp Collisions at STAR
CHRISTOPHER DILKS, Pennsylvania State University, STAR COLLABORATION — Surprisingly substantial transverse single spin asymmetries, A_N , have been observed in many hadronic channels since 1976. Since then, many attempts have been made to explain the underlying mechanism, such as the Sivers effect, Collins effect, and twist-3 contributions; however, no explanation has been fully sufficient. Diffractive contributions to the cross-section may provide additional insight to the origin of the large A_N . In the most recent RHIC run of pp collisions, the Forward Meson Spectrometer, an electromagnetic calorimeter covering a forward pseudorapidity range of $2.6 < \eta < 4$, recorded a substantial data set mostly composed of π^0 s from which A_N can be extracted. Furthermore, STAR installed Roman Pot silicon trackers to tag diffractive events through forward going protons. Correlations of π^0 events with Roman Pot triggers will for the first time address the role of the diffractive contributions to A_N . The status of the analysis of such correlations will be presented.

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