

Abstract Submitted
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Observation of W decay in 500 GeV p+p collisions J. HAGGERTY, Brookhaven National Laboratory, PHENIX COLLABORATION — Electrons from W^\pm decays have been observed in polarized p+p collisions at $\sqrt{s} = 500$ GeV in the PHENIX detector at RHIC. The status of the analysis of data from an integrated luminosity of approximately 10 pb^{-1} will be shown. The lepton energy spectrum and background estimate to the W signal from heavy flavor and hard QCD processes will be used to determine the cross section in the PHENIX central arms, which cover $|\eta| \leq 0.35$. W production from polarized beams probes the spin and flavor structure of the proton. The proton beams had a longitudinal polarization of approximately 35%, and progress on extracting an electron single spin asymmetry will be reported.

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