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Instillation of Resistive Plate Chambers for the PHENIX Detector LANGSTON PARKS, Morgan State University, PHENIX COLLABORATION — The muon trigger upgrade for Pioneering High Energy Nuclear Interaction eXperiment (PHENIX) will allow for faster and more accurate studying of flavor separated quark and anti-quark spin polarizations in the proton. One way to measure these polarizations is through the analysis of single spin asymmetries for $W-$boson production in proton-proton collisions. PHENIX is capable of measuring high momentum muons at forward rapidity, however the current trigger is not capable of separating leptons from W-decay. The goal of the upgrade is to improve the ability of the Relativistic Heavy Ion Collider (RHIC) to collect and analyze muons that decay from W-bosons produced in polarized proton-proton collisions. To achieve this goal Resistive Plate Chambers (RPCs) will be installed at the PHENIX detector located at RHIC along with new front-end electronics. This poster will discuss the installation of the RPCs.

Langston Parks
Morgan State University

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