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Efficiency of PHENIX Resistive Plate Chambers in RHIC $\sqrt{s} =$ 500 GeV p+p Collisions ANDREW NEDERLOF, BREET FADEM, Muhlenberg College, PHENIX COLLABORATION — The PHENIX collaboration studies polarized proton proton collisions created by the Relativistic Heavy Ion Collider (RHIC) at Brookhaven National Laboratory to better understand the spin structure of the proton. In order to improve the rejection of the existing muon trigger and allow the measurement of single spin asymmetries from the decay of W bosons, PHENIX has added stations of Resistive Plate Chambers (RPCs) to the north and south forward arms of the detector. An additional set of stations closer to the collision vertex will be added for the 2012 run. This upgrade enhances PHENIXs ability to trigger on high pT single muons. Efficiency of the RPCs will be estimated by comparing tracks reconstructed by the pre-existing subsystems with hits in the RPCs. Progress on this effort will be reported.

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