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Recent Performance of the Resistive Plate Chambers in the PHENIX Forward Trigger Upgrade¹ MICHAEL DAUGHERITY, Abilene Christian University, PHENIX COLLABORATION — The Relativistic Heavy Ion Collider (RHIC) at Brookhaven National Laboratory is the world's only polarized proton-proton collider. The recent $\sqrt{s} = 500$ GeV collisions enable a new W-boson physics program. Since W production is very sensitive to the spin-dependent quark distributions, these measurements will provide new insight into the spin structure of the proton. The PHENIX detector has undergone an extensive upgrade to significantly improve triggering on high-momentum muons produced by W decay at forward rapidity. The upgrade consists of new front-end electronics for the existing muon tracking chambers as well as new resistive plate chambers (RPCs) at two stations in each muon arm. This talk will review the current status and performance of the RPCs in the forward trigger upgrade from recently completed RHIC run 11.

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