

Abstract Submitted  
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**Study of the Forward Spin Trigger at PHENIX** MARSHALL TOWELL, Abilene Christian University, PHENIX COLLABORATION — The PHENIX experiment at the Relativistic Heavy Ion Collider (RHIC) at Brookhaven National Laboratory studies polarized proton-proton collisions to better understand the spin structure of the proton. While RHIC is operating there are millions of collisions each second, but the PHENIX data acquisition system, can only record a few thousand each second. To help select the rare events of interest, a new forward trigger has been commissioned that includes four stations of Resistive Plate Chambers (RPCs). During the most recent RHIC run significant polarized proton-proton data were recorded with the new trigger for the first time. The RPC high voltage was recorded and studied for each module and each run. Every PHYSICS run was also classified into four different categories depending on the high voltage variance, the number of trips, and the number of mismatches in each run. The runs were classified into 4 different categories; good runs, bad runs, okay runs, and polarization runs. A run was considered good if it had no trips and no mismatches. The results of this systematic study will be presented.

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