

Abstract Submitted
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Event Display for the RPC Test Stand at PHENIX CAITLIN HARPER, Muhlenberg College, THE PHENIX EXPERIMENT COLLABORATION — The Pioneering High Energy Nuclear Interaction Experiment (PHENIX) is located on the Relativistic Heavy Ion Collider (RHIC) ring at Brookhaven National Laboratory. One of the ultimate goals at RHIC is to obtain a more accurate understanding of a proton's intrinsic spin structure through polarized proton-proton collisions. The parity violating decay of W-bosons created in some of these collisions allows for the determination of flavor separated quark distribution functions. Recently, PHENIX has been focusing on the building and installation of Resistive Plate Chambers (RPC's). These RPC's are useful in the selection of high transverse momentum muon events from a background of low transverse momentum muon events. However, before the installation of these RPC's, it is essential to test their efficiency. We have assembled the RPC modules in a cosmic ray test stand and collected data. In order to better analyze the data and reconstruct the events, an event display was produced. The primary focus of this poster is the development of the track reconstruction and event display software.

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