

Abstract Submitted  
for the TSF06 Meeting of  
The American Physical Society

**Data Acquisition in Research and Development of Resistive Plate Chambers for the Trigger Upgrade for the PHENIX experiment at RHIC**  
JOHN WOOD, Abilene Christian University — To study the contributions of different flavors of quarks to the total spin of the proton, the PHENIX experiment at RHIC is installing a trigger system employing resistive plate chambers (RPC's). The trigger will allow data to be taken for the decay bosons produced in the parity-violating interactions of quarks during polarized p-p collisions at a much higher rate than without the upgrade. Prototypes of RPC's are being built with different materials and tested at the University of Illinois to determine characteristics such as position resolution, timing resolution, and rate capability. The data acquisition system for the test stand is presented in this poster. The system uses a number of CAMAC modules including a Jorway 73A crate controller.

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Date submitted: 21 Sep 2006

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