

Abstract Submitted  
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**Calibrating the PHENIX Muon Piston Calorimeter for the Analysis of Au+Au Collisions** JONATHAN BEN-BENJAMIN, PHENIX Collaboration — The Pioneering High Energy Nuclear Interaction eXperiment (PHENIX), located at the Relativistic Heavy Ion Collider (RHIC) ring at Brookhaven National Laboratory, is designed to examine direct probes from proton-proton and heavy ion collisions. The PHENIX Muon Piston Calorimeter (MPC) is being calibrated for a measurement of transverse energy in the forward region,  $3.1 < |\eta| < 3.8$ , using RHIC Au+Au collisions at  $\sqrt{s_{NN}} = 200$  GeV. The MPC consists of 196 towers in the north station and 220 towers in the south. The gain of each tower will be calibrated using an iterative process based on the  $\pi^0$  peak formed from the photon pairs into which they decay. This poster will focus on the methods we use for the reconstruction of  $\pi^0$ , such as data cuts, background generation and data isolation.

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