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Calibrating the PHENIX Muon Piston Calorimeter Using Fits to ADC Distributions[1] JAMES SILVA, Muhlenberg College, PHENIX COLLABORATION — The PHENIX Muon Piston Calorimeter (MPC), a homogeneous electromagnetic calorimeter located in the forward and backward directions (3.1 ¡ η ¡ 3.9) is being used to measure transverse energy from RHIC Au+Au collisions obtained in 2010. While the detector has been partially calibrated using the reconstruction of neutral pions in an iterative procedure, the calibration constants for some areas of the detector are not converging. In order to improve the initial set of calibration constants, a parameterization of the energy distributions as a function of distance from the beamline (obtained using well calibrated towers) is used to provide initial values to problem towers in the iterative procedure. The work done to produce this parameterization and its effects on the calibration process will be described.

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