

Abstract Submitted
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Muon Piston Calorimeters for the PHENIX Forward Upgrade at RHIC COLE WATTS, Abilene Christian University — New forward electromagnetic calorimeters for the PHENIX experiment at Brookhaven National Laboratory have been integrated into the PHENIX muon spectrometer magnet yokes. The two Muon Piston Calorimeters (MPCs) each consist of an array of PbWO_4 crystals, closely installed around the beam pipe. The South MPC was installed during the RHIC shutdown in 2005, while the North MPC, still in construction, is scheduled to be installed during the RHIC shutdown in 2006. The detectors have an angular acceptance of $3.1 < \eta < 3.65$ and $0 < \phi < 2\pi$ in azimuth. The two MPCs make it possible to measure cross sections and spin asymmetries for neutral pions in d-Au and polarized proton-proton collisions, respectively. We discuss the detector design, as well as the assembly and integration of the MPC in PHENIX, including the techniques used to prepare the PbWO_4 crystals.

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