

Abstract Submitted  
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**Transverse Energy at Forward Rapidities at RHIC using the PHENIX Muon Piston Calorimeter**<sup>1</sup> BRETT FADEM, Muhlenberg College, PHENIX COLLABORATION — In 2010, RHIC produced Au+Au collisions at  $\sqrt{s_{NN}} = 200, 62.4, 39,$  and  $7.7$  GeV. Progress in measuring transverse energy in the range  $3.1 < |\eta| < 3.8$  using the PHENIX Muon Piston Calorimeter (MPC) will be reported. The status of the 2010 MPC calibrations, studies of the hadronic response (the MPC is an electromagnetic calorimeter) and inflow and outflow of energy will be discussed. Transverse energy has been used to estimate energy density in ultra-relativistic heavy ion collisions and to discriminate between competing models of hadronic interactions. Furthermore, fluctuations in transverse energy might signal the presence of a critical point in the phase diagram of nuclear matter.

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