

Abstract Submitted
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Transverse energy distributions as a function of pseudorapidity from $\sqrt{S_{NN}} = 200$ GeV Au+Au Collisions using the PHENIX Muon Piston Calorimeter¹ CALEB CLEVER, Muhlenberg College, PHENIX COLLABORATION — While transverse energy at RHIC has been studied extensively at midrapidity, few results have been obtained at forward/backward rapidities. Using data taken by the PHENIX collaboration in 2010, progress measuring transverse energy distributions and $\frac{dE_T}{d\eta}$ within the acceptance of the PHENIX Muon Piston Calorimeter ($3.1 < \eta < 3.8$) will be reported. In addition to estimating the energy density in ultra-relativistic heavy ion collisions, these measurements can be used to distinguish different models of hadronic interactions. In this case, the 2010 data set comprises part of the beam energy scan data taken at RHIC, and the transverse energies as a function of beam energy might signal the existence of a critical point and/or first-order phase transition of the sQGP.

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