Abstract Submitted
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Measurement of pion, kaon, and proton spectra in Cu+Au collision at 200GeV at PHENIX[1] BRENNAN SCHAEFER, Vanderbilt University — The Relativistic Heavy Ion Collider at Brookhaven National Lab allows nuclear matter to be studied at extremely high temperatures and energy densities. The flexibility of RHIC to collide asymmetric nuclei such as Cu+Au at 200GeV can provide a controlled asymmetry in geometry and density both in the transverse and longitudinal plane, allowing us to systematically investigate the effects of initial geometry and density on particle production. The work in progress for measurement of the identified pion, kaon, and proton spectra as a function of centrality and over a wide transverse momentum range will be presented in the talk. The nuclear modification factor (R_{AB}) and particle ratios such kaon/pion, proton/pion, and antiproton/proton will also be studied and compared with other collision systems such as d+Au, Cu+Cu, and Au+Au.

[1]On Behalf of the PHENIX Collaboration

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