

Abstract Submitted  
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**Measurement of pion, kaon, and proton spectra in U+U collision at  $\sqrt{s_{NN}} = 193$  GeV with PHENIX<sup>1</sup>** BRENNAN SCHAEFER, Vanderbilt University, PHENIX COLLABORATION — The Relativistic Heavy Ion Collider at Brookhaven National Lab allows nuclear matter to be studied at extremely high temperatures and energy densities. RHIC is uniquely versatile in its ability to collide a wide range of species. In 2012 RHIC saw the first ever high energy collisions with the irregularly shaped uranium nuclei, providing the possibility to produce systems that have different initial energy density profiles for the same number of participating nucleons. This allows for systematic investigation of 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 will be presented. The nuclear modification factor  $R_{AA}$  and particle ratios such as kaon/pion, proton/pion, and antiproton/proton will also be studied and compared with the ratios measured in Au+Au collisions.

<sup>1</sup>for the PHENIX Collaboration

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