

Abstract Submitted  
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**Single Muon Production in Cu+Cu Collisions at  $\sqrt{s_{NN}} = 200$  GeV**  
IRAKLI GARISHVILI, Grad Student — The PHENIX experiment at the Relativistic Heavy Ion Collider at Brookhaven National Laboratory with its muon spectrometer has the ability to detect muons over the range of  $1.1 > |\eta| > 2.25$ . In the experimental run starting in January 2005 (Run 5), the experiment began collecting the first  $Cu + Cu$  collisions at  $\sqrt{s_{NN}} = 200$ . Single muon production is an important tool for studying charm production via semi-leptonic decays of D mesons. Open charm production not only contains rich physics itself, but also is considered to be one of the most important probes of the Quark Gluon Plasma, which is predicted to be created in relativistic heavy ion collisions. The present status of single muon studies for Run-5 Cu+Cu data by the PHENIX Collaboration will be presented and compared with previous single muon studies for p+p and Au+Au collisions.

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