

Abstract Submitted  
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$J/\psi \rightarrow \mu^+\mu^-$  **Production in Cu+Cu collisions from the PHENIX Experiment** ABIGAIL BICKLEY, University of Colorado at Boulder, PHENIX COLLABORATION — Heavy quarkonia provide a sensitive probe of the modification of the QCD confining potential that is expected to occur at high temperatures. As these quark-antiquark states hadronize they interact with the surrounding medium and provide a useful diagnostic for probing the state of matter present in heavy ion collisions. It is predicted that one of the signatures of a deconfined medium is the suppression of heavy quarkonia production due to color screening. However, other competing effects such as shadowing, heavy quark energy loss, and charm recombination influence the charmonium yield as well. In the PHENIX experiment the charmonium yield can be studied through the dimuon channel using the forward muon spectrometers. The  $J/\psi$  yields obtained from Cu+Cu collisions will be presented as a function of centrality, transverse momentum, collision energy, and species.

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