Abstract Submitted
for the APR09 Meeting of
The American Physical Society

Charmonium Cold Nuclear matter effects: Latest results from PHENIX LOREN LINDEN LEVY, University of Colorado, PHENIX COLLABORATION — Charmonium suppression in hot and dense nuclear matter has been argued to be a unique signature for the production of the quark gluon plasma (QGP). In order to search for this effect in heavy ion collisions one must have a clear understanding of the modifications present in the charmonium spectrum resulting from the interaction with normal cold nuclear matter. The PHENIX experiment has measured J/ψ's spectrum from deuteron-gold (d-Au) interactions at $\sqrt{s}$=200GeV and compared these with a proton-proton baseline (2006 RHIC run) in order to constrain these cold nuclear matter effects. We will present the latest analysis from the 2008 RHIC run, with an integrated luminosity of 80 nb^{-1}, compared to the 2.4 nb^{-1} collected in the 2003 RHIC run.

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Date submitted: 09 Jan 2009 Electronic form version 1.4