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 J/ψ Measurements in A+A Collisions at PHENIX MATTHEW WYSOCKI, University of Colorado, PHENIX COLLABORATION — J/ψ production in A+A collisions is expected to be an important probe of the produced medium. Suppression due to color-charge screening was long expected to be a smoking gun for the quark-gluon plasma. However, in recent years a more complex picture of inmedium charmonium production and evolution has emerged, including cold nuclear matter (CNM) effects and enhancement from recombination of c-cbar pairs. At the same time, new experimental results that extend our reach in p_T and new observables such as v_2 will allow us to better constrain theoretical models. The most recent J/ψ results in $\sqrt{s_{NN}}=200$ GeV A+A collisions from the PHENIX experiment will be presented. By measuring these observables as functions of transverse momentum and rapidity PHENIX hopes to put quantitative constraints on the various effects that contribute to charmonium suppression in hot and dense QCD matter.

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