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Title: Charmonium Production in p-A and A-A Collisions

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Charmonium Production in p-A and A-A Collisions

Charmonia (J/ψ , ψ') production provides a sensitive probe of gluon distributions and their modification in nuclei; and is a leading probe of the hot-dense (deconfined) matter created in high-energy collisions of heavy ions. I will discuss our current understanding of the modification of gluon distributions in nuclei and other cold-nuclear-matter effects in the context of recent p+p and p(d)+A charmonia measurements. Then I will review the latest results for nucleus+nucleus collisions, and together with the baseline results from d+A and p+p collisions, discuss several alternative explanations for the observed suppressions and future prospects for distinguishing these different pictures.