## **Quark Matter 2012**



Contribution ID: 334 Type: Poster

## Improving the $J/\psi$ Production Baseline in pp and $pA/{\rm d+Au}$ Interactions at RHIC and the LHC

Thursday 16 August 2012 16:00 (2 hours)

We assess the theoretical uncertainties on the inclusive  $J/\psi$  production cross section in the Color Evaporation Model using values for the charm quark mass, renormalization and factorization scales obtained from a fit to the charm production data [1]. We use our new results to provide improved baseline comparison calculations at RHIC. We also study the rapidity,  $p_T$  and centrality dependence of cold nuclear matter effects on  $J/\psi$  production in the CEM [2,3].\\[3\][3\][3\][3\]

\noindent [1] R. E. Nelson, R. Vogt and A. D. Frawley, in preparation.\\

\noindent [2] R. E. Nelson and R. Vogt, in progress.\\

\noindent [3] D. McGlinchey, A. D. Frawley and R. Vogt, in preparation.

Author: Prof. VOGT, Ramona (LLNL and UC Davis)

Co-authors: Dr FRAWLEY, Anthony (Florida State University); Mr MCGLINCHEY, Darren (Florida State

University); Mr NELSON, Randy (LLNL and UC Davis)

Presenter: Prof. VOGT, Ramona (LLNL and UC Davis)

Session Classification: Poster Session Reception

Track Classification: Heavy flavor and quarkonium production