XXIV QUARK MATTER DARMSTADT 2014

Contribution ID: **228** Type: **Poster**

Study of non-prompt J/ψ production from B decays in pp collisions with the PHENIX Detector at RHIC

Tuesday 20 May 2014 16:30 (2 hours)

A major objective in the field of heavy ion collisions is to quantify and characterize the properties of QGP by studying heavy flavor production. The J/ψ meson can be produced in one of three ways: 1) directly in the collision, 2) indirectly via feeddown from heavier charmonium states, or 3) from the decay of B mesons. If the J/ψ is produced through either of the first two methods, it is called a prompt J/ψ, while the third method produces a non-prompt J/ψ. With the newly commissioned forward silicon vertex detector (FVTX) in 2012, it is possible for the first time at the PHENIX experiment to extract non-prompt J/ψ's from the inclusive J/ψ signal by measuring a displaced vertex. In this poster, we will present the current status of the data analysis for J/ψ's that come from B decays in pp collisions at $\sqrt{s_{NN}} = 510$ GeV with the PHENIX experiment at RHIC. Results of this analysis will provide a proof-of-principle for future measurement in heavy ion collisions.

On behalf of collaboration:

PHENIX

Author: JEZGHANI, Margaret (Georgia State University)

Presenter: JEZGHANI, Margaret (Georgia State University)

Session Classification: Poster session

Track Classification: Open Heavy Flavour and Quarkonia