## Abstract Submitted for the DNP12 Meeting of The American Physical Society

## Analysis of J/Psi Production in Run 11 pp500 at PHENIX LOUIS

GARCIA, University of California, Riverside — Using the data from the most recent run of RHIC with proton-proton collisions at  $\sqrt{500}$  GeV, we plan to measure the J/Psi cross-section in the forward direction with rapidity (1.2 < |y| < 2.2). By measuring dimuon pairs and then calculating the invariant mass spectrum, we will obtain a peak for the J/Psi at about 3.1 GeV/c. Currently, we are determining cuts based on the particles' flight path through the detectors to eliminate the background of non-muons within the dimuon continuum. After, we will run GEANT simulations of the detector and apply the same cuts to determine their efficiency. Finally, we will be able to apply these simulations to the real data and calculate the yield of the J/Psi for this run. The measurements of the J/Psi yield in this run are important for comparing against Au-Cu collisions where the J/Psi yield is thought to be suppressed due to color screening in the QGP. For my poster, I will include the background signals and their dependence on the cuts, along with their efficiency at reconstructing embedded simulation J/Psis.

Louis Garcia University of California, Riverside

Date submitted: 03 Aug 2012 Electronic form version 1.4