Abstract Submitted
for the HAW14 Meeting of
The American Physical Society

Jet Studies on the MPC-EX pre shower detector upgrade to the PHENIX experiment[1] LUCAS FLORES, RICHARD SETO, UC Riverside, PHENIX COLLABORATION — As a part of the PHENIX experiment at RHIC, we are performing jet studies using the MPC-EX detector. The MPC-EX is pre shower extension to the MPC (the current lead tungstate calorimeter), made up of interleaved Silicon mini-pad detectors and Tungsten plates. This high resolution detector adds tracking and allows for the identification of π^0s and direct photons in the rapidity range $3 < \eta < 4$. By studying jet+photon events in simulations of protons on heavy nuclei, we aim to determine how well measurements of the Gluon Structure function can be made by the MPC-EX detector. One of the leading hypothesis to explain gluon distributions at low-x is the Color Glass Condensate.

[1]MARC U Star Trainee Program

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Date submitted: 26 Jul 2014 Electronic form version 1.4