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R_{CP} measurement at forward rapidities with muons from light meson decays in Au+Au collisions at $\sqrt{s_{NN}}=200$ GeV in the PHENIX experiment at RHIC WOOJIN PARK, Korea University, PHENIX COLLABORATION — We study high pT light meson production at forward rapidity as a function of centrality in Au-Au collisions. It is expected that the energy and parton density of the fireball created in Au-Au collisions would be smaller at a larger rapidity, thus reducing the jet quenching effects observed at central rapidity for light mesons. On the other hand, gluon saturation models predict a suppression of particle yields at small x, or at a large rapidity, for a given pT. We perform a quantitative analysis of the nuclear modification factor R_{CP} for high pT light mesons at forward rapidities in Au+Au collision at $\sqrt{s_{NN}}=200$ GeV. Light meson yields are measured in the PHENIX muon spectrometers through their decay muons. The latest results from this analysis will be presented.

WooJin Park
Korea University

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