Contribution ID: **369** Type: **Poster**

Measurement of J/ψ photoproduction in ultra-peripheral Au+Au collisions at √sNN=200GeV using the PHENIX detector

The idea to use the strong electromagnetic fields present in high-energy nucleus nucleus collisions to study photoproduction at hadron colliders has attracted growing interest in recent years.
PHENIX measured J/\psi photo-production in ultra-peripheal (UPC) Au+Au collisions at \sqrt{sNN} =200 GeV.
We define central UPC trigger as events with no activity in the Beam-Beam Counters, but activity in ZDC and EMCal.
This trigger selects the collisions with the impact parameter larger than twice the nuclear radius with a small background contribution from strong interactions. It provides a unique opportunity to study photo-production of hadrons by a strong electromagnetic field.

The purpose of the measurement of J/\psi photo-production cross section in ultra-peripheral collisions is to probe the gluon distribution at low-x.
We will report J/\psi cross section and its pT dependence measured using the high luminosity 2007 data.

Author: TAKAHARA, Akihisa (University of Tokyo)

Presenter: TAKAHARA, Akihisa (University of Tokyo)

Track Classification: Electromagnetic probes