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J/Psi Analysis in Ultra Peripheral Collisions at Relativistic Heavy Ion Collider with STAR DILAN MADAGODAHETTIGE DON, Creighton University, STAR COLLABORATION — Relativistic heavy ions carry strong transverse electromagnetic fields which can be treated as sources of quasi-real virtual photons. The ions interact through photon-Pomeron and photon-photon collisions at impact parameter more than twice the nuclear radius, so hadronic interactions are suppressed. We present recent results of the STAR experiment at RHIC measurement of J/ψ photoproduction in 200 (GeV) AuAu collisions at RHIC. The p_T distribution of the J/ψ mesons peaks at very low p_T , consistent with expectations for coherent photoproduction. Both the photoproduction cross section and the J/ψ rapidity distribution are expected to show the effects of gluon shadowing. The distribution of rapidity within $|y| < 1$ for the J/ψ mesons are also presented.

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