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Measurements of J/Ψ → e$^+$e$^-$ in Au-Aucollisions at $\sqrt{s_{NN}}$ =200 GeV by PHENIX at RHIC TAKU GUNJI[1], Center for Nuclear Study, University of Tokyo — Measurements of the J/Ψ yield in heavy ion collisions are expected to be one of the most promising probes of deconfined matter, since theoretical models predict that the J/Ψ yield could be strongly suppressed due to the color Debye screening effect in Quark Gluon Plasma. Recently, many theoretical efforts have been made to investigate the behavior of J/Ψ production at RHIC energy. One of the interesting predictions that has emerged, is that the J/Ψ yield could be enhanced due to the recombination of uncorrelated $c\bar{c}$ pairs. The PHENIX experiment measured the J/Ψ yield in Au-Au collisions at $\sqrt{s_{NN}} = 200$ GeV by using e^+e^- decay mode at mid-rapidity ($|\eta| < 0.35$) and $\mu^+\mu^-$ decay mode at forward-rapidities ($1.2 < |\eta| < 2.2$). The latest results of J/Ψ invariant yield and J/Ψ pT distribution obtained by using its e^+e^- decay mode from $\sqrt{S_{NN}} = 200$GeV Au+Au collisions will be shown.

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