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 $J/\Psi \to \mu^+\mu^-$ Measurement by the PHENIX in Au+Au collisions at $\sqrt{s_{NN}}$ =200 GeV MINJUNG KWEON, Korea University, PHENIX COLLAB-ORATION — The modification of heavy quarkonium yields and spectra is one of the most promising candidates to probe the nuclear phase transition from the confined hadron gas to the deconfined quark- gluon plasma. The PHENIX experiment at RHIC is designed to study heavy quarkonium production via the dilepton channels $(e^+e^-$ and $\mu^+\mu^-)$ with high precision. During the run 4, PHENIX has, for the first time, accumulated significant statistics for J/Ψ production in Au+Au collisions at $\sqrt{s_{NN}}$ =200 GeV. We report the first results on the $J/\Psi \to \mu^+\mu^-$ production measured in the PHENIX muon spectrometers, covering $1.2 < \eta < 2.4$ and $-1.2 < \eta < -2.2$.

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