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**Study of Heavy-Flavor Production at Forward Rapidity in Au+Au Collisions at  $\sqrt{s_{NN}} = 200$  GeV** AJEETA KHATIWADA, Los Alamos National Laboratory, PHENIX COLLABORATION — At RHIC energies, heavy flavor quarks are produced predominantly via hard interaction, prior to the formation and evolution of the Quark-Gluon Plasma (QGP). Once produced, they are excellent probes of parton energy loss mechanism and transport coefficients in both cold nuclear matter and the QGP medium. We measure yields as a function of transverse momenta of muons from the decay of heavy flavor hadrons in Au+Au collisions at  $\sqrt{s_{NN}} = 200$  GeV. The measurement will be carried out in forward rapidity region, and a previously published PHENIX measurement in  $p + p$  collisions will be used as a baseline for determination of nuclear modification factor. In this talk, current status of the analysis and the techniques applied will be presented.

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