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# Open Heavy Flavor Production at Forward Angles in PHENIX

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Measurement of the production of heavy quarks in heavy ion collisions can be used to probe the early stages of the created medium, study hot and cold nuclear matter effects, and test theoretical predictions concerning quark energy loss and initial-state effects. This is a current area of active research in the field and it is important to extend such measurements to the forward region. PHENIX can measure the production of open heavy flavor at forward angles with subsequent semi-leptonic decay of heavy flavor mesons into muons. We report the nuclear modification factor for the production of muons from heavy flavor decay in Cu+Cu collisions at root s_NN = 200 GeV for three centrality intervals and compare to theoretical predictions concerning the suppression of heavy quark production which incorporate heavy quark energy loss and in-medium heavy meson disassociation. Additionally, we report the charm production cross section for p+p collisions at root s = 200 GeV and compare results to Fixed Order plus Next-to-Leading Log predictions.

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