

# Quarkonia and open heavy-flavor production at STAR

*Wednesday, 30 May 2012 12:00 (30 minutes)*

Heavy flavor production is a useful tool to study the medium produced in heavy ion collisions. We will present results on production of charm hadrons via the reconstruction of  $D^0$  and  $D^*$  mesons, and compare them to FONLL calculations. The nuclear modification factor of  $D$  mesons can then be used to study medium effects. We will also present results on charmonium and bottomonium production. By studying charmonium  $v_2$ , one can estimate the amount of coupling between heavy quarks to the hot, flowing medium. The Upsilon nuclear modification factor, an important signature of deconfinement, will also be presented.

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