

Upsilon production at RHIC and LHC

Upsilon production in heavy ion collisions at RHIC energy is investigated. While the transverse momentum spectra of the ground state Upsilon(1s) are controlled by the initial state Cronin effect, the excited ($b\bar{b}$) states are characterized by the competition between the cold and hot nuclear matter effects and sensitive to the dissociation temperatures determined by the heavy quark potential. We emphasize that it is necessary to measure the excited heavy quark states in order to extract the early stage information in high energy nuclear collisions at RHIC.

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