

Measurement of Upsilon suppression in Au+Au collisions at 200 GeV

Measuring states in the charmonium and bottomonium families is predicted to provide an indication of the temperature of the quark gluon plasma. In a hot medium less tightly bound states are predicted to be dissociated at lower temperatures than the more tightly bound ground states.

Understanding quarkonium suppression mechanisms of the QGP is one of the outstanding challenges for theorists and experimentalists at RHIC and the LHC.

PHENIX has made detailed measurements of J/ψ suppression in forward and in mid-rapidity. A large sample of Au+Au collisions at $\sqrt{S_{NN}}=200$ GeV was collected during 2010 data taking run at RHIC.

From this sample, Upsilon mesons at mid-rapidity were identified in the di-electron decay channel and were studied to calculate their nuclear modification factor relative to that of the J/ψ .

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