

# Upsilon Measurements at PHENIX

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The suppression of quarkonia in heavy ion collisions has long been thought to provide an indication of the temperature dependent Debye screening length of color charge in the quark gluon plasma. A large sample of d+Au and Au+Au collisions at  $\sqrt{s_{NN}}=200$  GeV has been collected by PHENIX in 2008 and 2010. The large statistical sample allows for both the observation of Upsilon in the hot dense medium created by Au+Au collisions, but also a baseline measurement in d+Au. These baseline measurements aid the interpretation of the heavy ion suppression by separating the cold nuclear matter effects that result from using a nuclear target, but also add to our fundamental understanding of quarkonia production. In this talk, we will present measurements of Upsilon yields in hot and cold nuclear matter as observed by PHENIX at mid-rapidity in the di-electron decay channel and at forward rapidity in the di-muon decay channel.

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