

Abstract Submitted  
for the APR10 Meeting of  
The American Physical Society

**Upsilon + Hadron correlations at the Relativistic Heavy-Ion Collider (RHIC)** MATTHEW CERVANTES, Texas A&M Cyclotron Institute, STAR COLLABORATION — STAR has the capability to reconstruct the heavy quarkonium states of both the J/Psi and Upsilon particles produced by the collisions at the Relativistic Heavy Ion Collider (RHIC). The systematics of prompt production of heavy quarkonium is not fully described by current models, e.g. the Color Singlet Model (CSM) and the Color Octet Model. Hadronic activity directly around the heavy quarkonium has been proposed [1] as an experimental observable to measure the radiation emitted off the coloured heavy quark pair during production. Possible insight into the prompt production mechanism of heavy quarkonium can be obtained from this measured activity. Using STAR data from dAu collisions at  $\sqrt{s_{NN}}=200$  GeV, the high S/B ratio found in Upsilon reconstruction [2] can enable us to perform an analysis of Upsilon + Hadron correlations. We will present our initial investigation of such an analysis.

[1] Kraan, A. C., arXiv:0807.3123.

[2] Liu, H., STAR Collaboration, arXiv:0907.4538.

Matthew Cervantes  
Texas A&M Cyclotron Institute

Date submitted: 27 Oct 2009

Electronic form version 1.4