



High Energy Physics - Phenomenology

Thermal Upsilon(1s) and χ_{b1} suppression in $\sqrt{s_{NN}}=2.76$ TeV Pb-Pb collisions at the LHC

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I compute the thermal suppression of the Upsilon(1s) and χ_{b1} states in $\sqrt{s_{NN}}=2.76$ TeV Pb-Pb collisions. Using the suppression of each of these states I estimate the total R_{AA} for the Upsilon(1s) state as a function of centrality, rapidity, and transverse momentum. I find less suppression of the χ_{b1} state than would be traditionally assumed; however, my final results for the total Upsilon(1s) suppression are in good agreement with recent preliminary CMS data.

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