Contribution ID: **7**   Type: **not specified**

Bottomonia suppression in 2.76 TeV Pb-Pb collisions

Tuesday 30 August 2016 19:20 (20 minutes)

We compute the QGP suppression of $\Upsilon(1s)$, $\Upsilon(2s)$, $\Upsilon(3s)$, χ_{b1}, and χ_{b2} states in \mbox{$\sqrt{s_{NN}} = 2.76$ TeV} Pb-Pb collisions. Using the suppression of each of these states, we estimate the inclusive R_{AA} for the $\Upsilon(1s)$ and $\Upsilon(2s)$ states as a function of N_{part}, y, and p_T including the effect of excited state feed down. We find that our model provides a reasonable description of preliminary CMS results for the N_{part}-, y-, and p_T-dependence of R_{AA} for both the $\Upsilon(1s)$ and $\Upsilon(2s)$. Comparing to our previous model predictions, we find a flatter rapidity dependence, thereby reducing some of the tension between our model and ALICE forward-rapidity results for $\Upsilon(1s)$ suppression.

Literature:

1) B. Kroupa, R. Ryblewski, M. Strickland, Phys.Rev. C92 (2015) no.6, 061901

2) M. Strickland, Phys.Rev.Lett.107,132301 (2011)

3) M. Strickland, D. Bazow, Nucl.Phys.A879, 25 (2012)

Summary

Primary authors: Dr STRICKLAND, Michael (Kent State University);   RYBLEWSKI, Radoslaw (Institute of Nuclear Physics PAN)

Presenter: RYBLEWSKI, Radoslaw (Institute of Nuclear Physics PAN)

Session Classification: Section D

Track Classification: Section D: Deconfinement