

Referee 1:

Referee's report on epjconf211091 by Kaifeng Shen (for the STAR Collaboration)

"Recent J/ψ results in $p + p$ and Au+Au collisions from STAR"

Executive summary

The paper is well-written and the RAA results of Au+Au at 54.4 GeV and J/ψ production in $p+p$ collisions at 500 GeV contribute significantly to enhance our understanding of QGP properties in relativistic heavy-ion collisions at RHIC energies. However, the paper still needs some minor corrections and clarifications. I'd ask the authors to take into account the comments below.

Text remarks:

L1: "1,2,*" the affiliation and the e-mail should be on the name of the author, and not on (for the STAR Collaboration).

>> Thanks a lot for your nice comments, I put "1,2,*" to the top right-hand corner of author's name

L7: midrapidity --> midrapidity region

>> done

L51: "RAA is defined as follows" —> The nuclear modification factor, RAA, is defined as follows.

Note 1: it is better to remind the non-expert what the meaning of RAA in the text (I see that you did it in the abstract).

Note 2: you need to mention in the definition of RAA that you are using an inelastic cross-section of pp like: " $d^2\sigma_{\text{INEL}}/dydp_T$ "

>> done, and add "INEL" to the top right-hand corner of "sigma"

L62-63: "There is no significant energy dependence within uncertainties up to 200 GeV."

For figure 1: Right, it is crucial that you point out clearly, in the text or caption figure, which data and from where you took the RAA for SPS energies.

There are many papers published, some of them point out there is no suppression, and some

of them, there is suppression at SPS energies, and it depends on the pp data reference. This is an important point.

>> In the caption of the right panel of fig 1, I point out the references of SPS, STAR and ALICE data points separately and also state the p+p references of these energies at line 57 to line 64

General comment: The pp reference at given energy for RAA plots has to be well stated in the text; is it extrapolated or measured with reference?

>> The pp reference for 39, 54.4, 62.4 and 2760 GeV is extrapolated and the pp reference for 17.2, 200 and 5020 GeV is measured. I added the supplements of pp reference at 17.2, 200, 2760 and 5020 GeV at line 59 to line 64