Long Symmetric Cumulant paper : 3nd IRC review

Dear IRC members

We would like to thank all IRC members for useful discussions to improve the manuscript. The PC+IRC meeting was held on 8th of March, 2017(<https://indico.cern.ch/event/622018/>). The main discussion was on the rejected suggestions on Ilya’s comments and model comparisons of vn. We now have fully taken his comments. In addition to that, we put the individual flow harmonics vn comparisons to all the model calculations we used in the paper. This would help to resolve what Sudhir concerned about the model comparison during the first IRC review.

The summary of the changes made in the updated version of the manuscript are provided below briefly.

Reviewed version :

New version:

Difference between new and reviewed version:

Regards,

DongJo on behalf of PC

**A. Ilya Selyuzhenkov’s comments on restructuring of Secs. 5&6**

Here is the proposal for restructuring of Secs. 5&6:

1. Arrange and focus on physics discussion by two categories

"centrality dependence" and "pt-dependence" which will become two main

sections instead of the current structure. This will require (among

other things) to move Fig. 2 and text on lines 230-246 to what is now

Sec 6.3 on line 410

2. Combine Figs. #3-#7 into 3 new figures (2 columns [SC and NSC] x 5

rows [2-3, 2-4, 3-4, 2-5, 3-5]) - one per each set of model

comparisons (Fig. #3 [EKRT+viscous hydro], #4 [2+1 hydro], and #5

[AMPT]). Fig. #3 will require to include as the top panels the

comparison to 2-3 and 2-4 with EKRT which is in the short SC paper but

currently missing in the long paper (I think this should be included

for completeness).

The arguments for combining the figures are:

- Frankly, I do not understand why to separate the discussion of

2-3-4 and 3-4-5 harmonic correlations. We do not do that in Fig. 1 and

I think we should follow this for model comparison, i.e. just have an

extended "replica" of Fig.1 with 2x5 panels for each of the three

groups of model comparison.

- Combining will avoid some repetitions which are currently present

in Secs. 6.1 and 6.2

- It will give a better overview of data to model comparison for all

harmonic combinations in one figure, which should improve

significantly the readability of the paper in addition to reducing the

high number of figures.

3. The model description will stay as it is now, but will be presented

not as a separate Sec. 6, but as a part of Sec. "centrality

dependence" and discussion of the results.

R : Figures are updated and the corresponding changes are made for figure captions and texts and etc.

**B. Model comparisons of the Individual flow harmonics $v\_n$ in appendix.**

R : $v\_n$ comparisons are added in appendix and the corresponding changes are made in the Sec.6.