

Dear referees! Dear organizers!

I sincerely thank the referees for their precise and kind remarks on the manuscript of these proceedings' article!
The requested changes were applied and the referees' advices were considered up to my best knowledge. Below this message you will find a list of differences to the old version of the manuscript.

While I do not want to be too much of a bother to your already busy schedule, concerning the publication of the proceedings, I was wondering if it is still possible to make some changes and adjustments to the proceedings: After a recent, thorough, reinvestigation of the distributions shown in Fig. 3, we found that they are faulty due to insufficient statistics. This is in particular a problem in regions, where only a few events occur, since they are overrepresented due to our initial choice of a logarithmic scale, which might be misleading.

Recently, we found a different distribution, which allowed us to find considerable differences between the 2 models investigated for the proceedings. An inclusion of these figures instead of the old ones would be of higher value, since they relate more directly to the subject title "Constraining in-medium heavy-quark energy-loss mechanisms via angular correlations between heavy and light mesons".

Thus, we would like to kindly ask you to accept this new version as a replacement of the one the current one.

We apologize, especially to the referees, for the inconveniences this implies! Appended below the list of changes that were required by the referees, you will also find the list of additional changes that we made right now.

With my best regards and many thanks in advance,
Martin Rohrmoser

List of changes requested (the copied parts of referees' report are written in italic):

1. *What is the reason you selected "the forward direction" in the study of D - π meson angular correlations? One sentence explaining the reason will help non-expert readers.*

Thank you for the advice! Indeed it has never been mentioned that such an investigation focusses more on the medium effects of individual jets, such as jet broadening, as compared to studies that emphasize more the spatial dependencies of in-medium energy loss, such as, e.g., D - \bar{D} correlations. Thus, the sentence "This is motivated by the fact that the emitted gluon in radiative collisions hadronizes and this hadron is likely to be correlated to the emitting heavy quark." at the end of the second paragraph of the introduction was replaced by "This second approach is more sensitive to medium effects on the evolution of an individual jet, e.g. angular jet-broadening."

2. *Numerals should be spelled out except for Figure numbers, values of physical quantities etc. Here are what I catch in the paper:*

- 1) "2-particle" -> "two-particle"
- 2) "3-momenta" -> "three-momenta"
- 3) "4-momenta" -> "four-momenta"
- 4) "2 different" -> "two different"
- 5) "3 different" -> "three different"
- 6) "splits 2 times" -> "splits two times"
- 7) "2 consecutive" -> "two consecutive"

changes applied as requested.

3. *The phrase of "both as well as" is repeatedly used in many places. One may want to use either "both and" or "as well as".*

changed in the introduction in line 4 and the last sentence.

4. Abstract

- 1) *a quark gluon plasma* -> "the" quark gluon plasma
- 2) "undergo both," -> "undergo both"
- 3) "within jets was" -> "within jets were"

changes applied as requested.

5. *Introduction*

L1: *through a QGP* – > *through the QGP*

L2: *both,* – > *both*

L6: *v2, [1].* – > *v2 [1].*

L9: *,like* – > *such as*

L20: *"an" evolution*

L22: *and of every* – > *and "that" of every*
changes applied as requested.

List of additional changes:

- the last 8 lines were deleted and replaced with a different end of section 3 "Results for angular correlations" (starting with the sentence after "Furthermore, in Fig. 2, one observes angular ordering in the form $\vartheta_1 > \vartheta_2$ in the vacuum.", directly under the caption of Fig. 2.).
- Fig. 3 was replaced.
- The last sentence of section 4 "Conclusions and outlook" was replaced.
- The format of the references was adjusted: The comma before the "and"s and after "Cassing" in the last line were removed, the page numbering shortened, and the section numbering removed.