To take into account the suggestions of the referee, we have made the following changes to the manuscript:

- 1. The layout of the figures 1, 2 and 3 are improved.
- 2. We reduced the space in between the equations to maintain the page limit and to improve the layout. Though, in this process, the numbering of the equations has changed, yet no inclusions or exclusions of equations have been done.
- 3. We added some explanations before Eq. 16 (Eq. 23 in the previous version) as suggested.
- 4. The typos and the errors are corrected.

Below is our reply to the query asked by the referee about the value of radius we obtain from the Tsallis fitting in Fig. 1 (Sec. 4, line number 3):

The value of the radius (4.81 fm) is the kinetic freeze-out one and not to be related to that of the proton. If we instead follow a different (but equivalent) approach of fitting with dN/dy (number of particles per unit rapidity y at y=0), which is an experimentally observed quantity, we get roughly the same value. And hence, the value of the radius is not unphysical.