

- Abstract: 0,1 or at least 2 -> write out 'zero' 'one' 'two'
  - Done
- L1: Replace "The highly contracted electromagnetic (EM) fields surrounding relativistic heavy ions" By "The Lorentz boosted electromagnetic (EM) fields ...."
  - Done
- L7: search new -> search for new
  - Done
- L8: offer -> allow
  - Done
- L17: 'a concept bearing analogy to centrality' -> a concept analogous to the centrality
  - Done
- L44: check the spacing after  $\mu\mu$  (seems to be a little large)
  - Done
- L46-47: Do we really want to say 'when requiring a functional ZDC'? makes it sound like the detector is 'broken'. I would just remove this and say 'The PbPb sample corresponds...'  
 Note: If you remove this, you need to make sure the ZDC acronym is defined on the next mentioning of ZDC.
  - This is suggested by conveners to avoid potential confusion with other 2018 PbPb CMS papers using  $1.7 \text{ nb}^{-1}$
- L109: delete 'in the analysis'
  - Done
- L116: need a thin space between 0.2 and '(stat)' (use a ~). Same comment for after (syst)
  - Done
- L116: remove comma
  - Done
- L118: 'in a measured gamma.... event, there may be concurrent -> a single measured gamma... event may contain concurrent...'
  - Done
- L118: delete 'present'
  - Done
- L118-L120: I would split this into a new sentence: EMD events. These concurrent events can emit neutrons and migrate the neutron multiplicity....
  - Done
- L120: change electromagnetic dissociative pileup -> (EMD) pileup
  - Done
- L121: maybe we should put zero bias in quotes here e.g. "zero bias"
  - Done
- L126: effect-> effects
  - Done
- L129: do we really need to say 'corrected for efficiency and dissociative pileup'? We can just say 'the corrected  $\alpha$  distributions of...'  
  - Done

- L133: Core and Tail don't seem like they should be capitalized. It's also awkward to say 'tail (tail)' here. Can we just incorporate the 'core' and 'tail' bits into the sentence without parentheses?
  - Changed "a narrow peak close to zero (Core) and a long tail (Tail)" to "a narrow core close to zero and a long tail"
- L134-135: is dominated by, mostly originates from -> switch to 'mostly originates from' in my opinion. Keeping both is awkward.
  - Done
- L136: of the produced lepton-> 'off the produced' or 'from the produced'
  - Done
- L137: In  $X_n X_n$  class -> in the  $X_n X_n$  class (same with  $0_n 0_n$  later)
  - Done
- L140: in supplemental plot -> in the supplemental material
  - Done
- L141: In the  $0_n X_n$  class,
  - Done
- L147: Delete 'Instead of using the value at bin center'. It is clear what is done without this.
  - Done
- L149 and onward: Use regular text instead of italics for core in  $\alpha^{\text{core}}$  example:  $\alpha^{\text{core}}$ 
  - Done
- L149: from core component -> from the core component
  - Done
- L151: remove comma
  - Done
- L154: dissociative pileup -> the dissociative pileup
  - Done
- L160: space between < and 2.7 should be removed
  - Done
- L160: <0.7% awkwardly split between lines (maybe remove the space between?)
  - Fixed
- L162: and according -> according
  - Done
- L164: the "+" does not work here. I suggest 'from STARlight between pure gamma.....mu- and photo produced coherent Y(1S) mixed with gamma.....mu-.'
  - Done
- L168: for <M> results -> for the <M> results
  - Done
- L168: Slightly rewrite to: a second order polynomial function is fit to the mass spectrum, excluding.....GeV, to interpolate...
  - Done
- L179: check spacing here (thin space before and after (stat) and (syst) )
  - Done

- L179: The  $10^{-6}$  needs to be inside the 2nd parenthesis instead of outside of it.
  - [A new submitted CMS paper \(arXiv: 2005.04764\)](#) puts the  $10^{-6}$  outside. We keep it as is now
- L179: remove 'also'
  - Done
- L187: delete 'reported' and 'also'
  - Done
- L198: tend -> tends
  - Done