Type A:

Title: Should we consider to spell out „L1“ as „Level-1“ in the title? To avoid to use an acronym already in the title

Section 1:
- You need to introduce „PU“ earlier than you do now (L371), because it’s used in Fig. 1. You could do this e.g. in line 63: „...per event, referred to as pileup (PU), in the ...“
- L63: „The number ... is a large increase“ does not read well to me. Better „represents a“. Then you must get rid of the „represents“ in line 64, which could be done by „eras (...), resulting in a significant...“
- L77: suggest to move [3] up, e.g. to L74, after „are shown“.
- L79ff: in this paragraph the fact that we have a 3.8T magnetic field and that tracks are bent in this fields is missing. You mention this in L91, but it’s needed earlier, I think.
- More in general the order of information in the paragraphs between L79 and L107 could be improved. You start with the tracker, move to stubs and track trigger aspects, then move back to the detector description and layout.
- L98: continue lower case after the colon (as you do elsewhere)

Section 2.1:
- L176: you refer to Fig. 3 only for the seeding, but Fig. 3 shows more. You should either refer to it at several places, or say in a more general way that the steps are illustrated in Fig. 3.
- Fig. 3: the caption starts abruptly, start with a sentence like „Illustration of the various steps in the tracklet algorithm.“

Section 2.2:
- L208: „track reconstructions“ should be „track reconstruction“
- L264: a comma is needed before „as a consequence“, I think

Section 3:
- L274: Capital T in „Tracklet formation“
- L311: „block ram“ should be „block RAM“
- L312: „Data“ is plural according to CMS guidelines. So should be „they will“, and „These data are“

Section 3.1:
- L331: the caption 3.1 (now L341) should come here
- L340: avoid such lonely lines (might change anyway)
- Fig. 5: in the caption, it should be „stubs‘ “I think (apostrophe)
- Fig. 7:
  - Caption: red and blue should be grey and black
  - Caption: „shows the number that pass“ should better be „the number of stub pairs that pass“
  - X-axis label: „L1L2“ should be „L1+L2“
Section 4:
- L367: „data were“
- L369: introduce „t“, also should it not be „ttbar events“ instead of „ttbar collisions“? E.g. „simulated top-antitop (ttbar) events“
- L371: move the definition of PU to an earlier place (see earlier comment)
- L377: you have a change of tense here that I found not optimal, „provided“, and „used“
- L382: „plus the forward endcaps“: assuming that „forward“ is here referring to the +z direction, it should be singular „endcap“

Section 4.1:
- L404: remove „see“ (ugly and not needed)
- Fig. 11: in the caption it should be „track p_T“, not „track parameters“ (you show only one parameter)

Section 4.2:
- L415: „in 15m long optical fibers“ or „in 15m of optical fibers“
- L437: typo in „demonstrator“
- L438: „are shown“
- L439: two full-stops
- Table 2:
  - Remove the double horizontal lines also here
  - You do have to introduce the TMUX variable somewhere, or get rid of it everywhere
  - „clock speed 240MHz as the demonstrator“ → „clock speed of 240MHz as in the demonstrator“ or „clock speed (240MHz) as in the demonstrator“
- Fig. 12: you say you will still fix it, very good. May criticism to this figure at this point is:
  - Bad quality (resolution), looks like a screen shot
  - Contains acronyms that were never explained (GT, BUFG, MMCM)
  - Should be moved after Table 3 (well, depending on what is described first, now Fig. 12)
- Table 3:
  - Naive question: are all numbers in the „Full sector“ line without units?
  - Your are probably aware of [Table being updated] and have not forgotten to take it out

Section 5:
- L469: remove space in „Gb/s .“
- L471: „section“ needs to be lower case here (as not referring to a concrete one)

Section 5.1:
- L489: „disc“ should be „disk“, as everywhere else
- L494: „within two ATCA“ would read better
- L496/497: the strings of numbers „72 10“ and „72 2.5“ are not very nice. Can this be avoided somehow?
- L499/504: „24x28“ and „12x18=216“ would look more pretty if written within mathmode (distances)
- L502: should be DTCs’ (apostrophe)
- L504: the comma should be a semi-colon
- L528: TMUX again

Section 6.1.1:
- Fig. 14: „Preliminary“ to be removed?
Section 6.1.3:
- Fig. 16: still remove „Preliminary“?
- L573: text should continue below this line

Section 6.2:
- L605: „hadronic tau lepton“
- Fig. 19: I think you cannot say „Resolution in sigma(p_T)/p_T“, as sigma(p_T)/p_T IS the resolution. I should something like „Relative p_T resolution (sigma(p_T)/p_T) (top left) and resolution in phi_0, ...“ Also not elegant, maybe you can find a better way.

Section 7:
- L626: I suggest to remove „(Table 3)“ here. Not needed, and breaks flow somehow. Nobody will look back at this stage.
- L632: „improvements“ (plural)
- L634: ttbar not italic
- L636: 3% : you mentioned 4% earlier, would be better to be consistent
- L641: „into one module“ → „into another module“? (phrasing)

References:
[1], [3], [4]: capital „C“ in „CMS Collaboration“. PubComm is very sensitive to that.
[3], [4]: please write the titles in terms of capitalization etc. exactly as they are; e.g. it’s „The Phase-2 Upgrade of the CMS Tracker“
[1] I would remove „S. Chatrchyan et al.“
[11] Should be „CMS Collaboration“, and again remove the name of the guy
[12] Here now you have „The CMS Collaboration“. I would try to unify all this to „CMS Collaboration“
Type B:

Section 6.1.2:
- The whole subsection is a bit strange, as there is no quantitative result or at least conclusion

Section 6.2:
- Fig. 20: I don’t understand how the curve with quality cuts can be above the curve without quality cuts in many bins.