

Dear Pierre,
These are my final remarks.

1. HTCC detector in the neural network analysis
 - a. I still think that the HTCC detector that was specially designed for the particle identification has to be used in the neural network that you have successfully implemented for the positron identification. It is evident even from the pictures that you included in the response to my questions that this device has very different response to pions and positrons/electrons.
 - b. I cannot buy arguments that the MC simulation was not in a good shape when you started your analysis. The HTCC MC fix is very easy and is not time consuming. I think that if you need some MC modification that is demanded by your physics you have to do it and don't wait somebody to fix the problem for you.
 - c. I understand that you have no time (and willing) to improve your PID method what will be useful for the future CLAS12 analysis.
 - d. Let us close this case considering the fact that the level of background is small and any PID modifications will not significantly change the final result.
2. Section 2.3.10 (you wrote 2,3,10 what is confusing) is very good.
3. I like your section 3.12 Lepton neural network PID: further checks. Unfortunately, you provided only final result without any details like electron/positron momentum distributions similar to Fig. 2.26 in full momentum range.
4. Asymmetry and cross section.

It is true that the goal of this analysis is to publish the ratio of the cross sections but let me stress that this is the ratio of the cross section of the **definite processes**. It is not the ratio of two numbers correlated with the beam helicity. A Bethe-Heitler reaction is dominant in the study that you are doing and of course it is important to know that we really measure this reaction but not something else. I am sure that you as physicists will be VERY happy to get estimated cross section close to the theoretical one. I think that you have all ingredients in hands to make these estimations and you can do it during one hour.
5. There are still several misprints in the note
 - a. Line 578 electron
 - b. Line 1331 compared

My final conclusion: the note is ready to be released.

Best regards,
Valery