

Recap of the meeting today and the main points we discussed:

=> First we regret that Geumbong (excused), Anton, Sergei and Valeri (we expected them to join) didn't attend the meeting today.

=> Chang Seong presented his 3 new students: Jong-Ho, Ji-eun and Hakseong (please Chang Seong include them in the email list: thanks).

=> Jong-Ho is working with Chang Seong on the electron isolation and presented the workplan for this study. See his slides in the indico page.

Aurore asked for the main motivations to include this requirement as the current PixTrk algorithm (without isolation) is giving results similar or sometime better to the L1track (outer tracker which includes isolation).

Chang Seong reminded that the L1track including isolation improves by a factor 2. Thus indeed it is important to look what is the effect with PixTrk.

From Physics point of view, Aurore suggested that isolation would be a good parameter to add for the tau-trigger we didn't yet really develop.

=> b-tagging: Geumbong could not yet start on the track reconstruction (adapting Anders Ryd's package to the new GMSSW9 soft and HL-LHC detector description).

We expect to hear from her next week.

=> electron and brem trigger: Junho just moved back to Korea last week and could not yet update the brem results he showed 2 weeks ago. Here his workplan:

=> extend the electron pixel trigger down to $\eta=3$, by including HGCALE

=> add plots to the brem studies (plot of the efficiency as a function of P_t with electron up to 100 GeV, extend η range as mentioned above, show the efficiency in the case of soft brem or hard brem), more details in a next message.

=> we didn't hear from the muon pixel based trigger proposed by Un-Ki since sometime: is this still being studied?

=> Chang Seong with Ji-eun and Hakseong will be studying the forward region down to η of 4 (tbc): this is an important topic too.

=> Modelling of a fast L1 pixel trigger to be possibly included in the FE Pixel ASIC: Aurore reported that Anton and Sergei have succeeded to achieve the modelling of this case but that we have to wait for RD53 before going further on this. As a result such a case is feasible at least at the modeling level. And more in the next few months.

=> On the to do list and workplan:

- The second DN with the main updates of the feasibility studies: A draft should be available by the end of September => we expect feedbacks from the detailed outline circulated by Aurore a few weeks ago (Chang Seong, Junho, Geumbong, Un-ki and Aurore).

- Presentations should be given at the L1P2T and UPWG meetings.

- Junho will make a presentation of L1Pixel trigger at the Korean Physics

Society Meeting end of October.

For all these presentations we should join efforts in order to help the presenter to make an excellent talk.