babyMIND software meeting

Minutes taker Sven-Patrik Hallsjö

Those present Etam Messomo, Yannick Favre

Location of the meeting Vidyo

Date July 8, 2016

Overview of topics

Prel. agenda - Analysis framework status - DAQ status - Analysis goals, what should be done before the next test beam?

1   Analysis framework status

Sven-Patrik Hallsjö informs, SaRoMaN software integrations has started, can get data into the reconstructions with some minor bugs. Needs more time to complete.

Current analyses seem to suggest that hits do not occur at the same time in the different FEB's. More analysis is needed.

The current analysis code works, but to do several feb's becomes a quantitative analysis. Will upgrade the analysis code to tackle this as well.

Etam Messomo adds, we need to document all of the bugs in the DAQ. We can use Trello or something similar. Perhaps something with comments in phase with the code version? Asana?

Report bugs,

- Resolved by Yannick, hardware/firmware

- Resolved by Yordan, unpacking

- Resolved by Patrik. analysis.

Configuration database is needed, preferably for next beamtest. XML config file changes over time, need database, need Traceability.

2   DAQ status

Sven-Patrik Hallsjö adds, using only Yordans unpacking, old revision used now because simpler to read corrupt files. Need to make a list of what is wrong in either DAQ files or in unpacking code.

3   Analysis goals, what should be done before the next test beam?

Etam Messomo lists,

- Event display,

- Time histograms deltaT, want to associate time in next gtriggs aswell. Hit with amplitude.

- Looking at plots.

- Bug in timing in current firmware could give duplicate hit times, different times associated with amplitudes.

- Produce hit time cut, only one hit time per amplitude? Remove duplicate by using tag id.

- Calculate estimated num hits for a channel given the num of spills, can check with what we get in histo.

- Fit, determine spread left and right. channel 8,24 same asic, bar, center of bar. Can fit data and get rough resolution from FEB.

- Does Resolution evolves as position in Gtrigg.

- Compare to other scenario, with scintillating triggers. Is there a difference? More complex, far worse inherent resolution.

Sven-Patrik Hallsjö, will work on it right away.

4   Next meeting

Friday the 15/7-16 at 10 am BST via Skype.