

Minutes of the Coral-weekly meeting, 27/06/2018

Communications:

- We will soon start P07 with new BMS-calibrations, before this we will run short test-production (10 runs) for evaluation of preliminary RICH-indices.
- Proposal from Yann to use FFT option for ECAL1 and ECAL2. Some calibrations are needed, not really clear if Stefan Huber can produce these calibrations. According to Sergei this gives an improvement for ECAL1 (and not much for ECAL2 since it was less noisy).
- The proposal is for RICH production to activate FFT option and to enable calorimeter CSS-tree in CORAL histograms. Then a script should be run on this tree to produce FFT-calibrations.
- Vladimir has updated the calibrations for HCALs.
- Request from Catarina to give a priority to DY-2015 test-production for trigger efficiency studies.
- Reminder from B.P. to check carefully detector positions and resolutions assigned in CORAL.

1) Artem Petrosyan – production system

- Histograms merging to be done as for mDST-merging (for pion production data for RICH we have too large histograms)
- For BW; currently testing about 1000-2000 simultaneously running jobs (15 pilots on a single login node, no CPU-problem). The test goes smooth and the plan is to further increase the number of jobs.
- Some minor work on current production system (status updates, etc.).
- New powerful MySQL-DB server is available, to be included in the production.
- Tatiana is switching the information-source for monitoring (from prod. sys. to PanDA)

2) Vladimir Kolosov – calorimeter positions

- The alignment of calorimeters was not done for 2016 and 2017. Calorimeters might be misaligned. This introduces mismatches in track to cluster associations.
- Vladimir will check and submit the correct positions ASAP, so that the changes can be implemented in forthcoming productions. Some short test productions may be needed.

3) Andrei Gridin – express analysis

- Comparison of selected runs of 2018 with 2015 data. Suggestion to check error-dump in the logbook before selecting the runs.
- Suggestion to get rid of beam decay muons (BDMs) using angular and momentum cuts.
- Beam seems to be elliptical (should not be related to inner veto since it was untouched). It was clarified with simulations and calculations that also divergence is wider for X compared to Y.
 - It is not really clear what can be the impact of elliptic beam at the level of the analysis. It is not really clear if we need a elliptic cut on events in the target to avoid the non-illuminated range. From first sight there are no strong arguments against, but it has to be decided by the analysis group.
- Request to Marco to release his UE for flux determination.
- Request to normalize the results to flux; otherwise it's difficult to compare number of J/psi's.
- Widths are somewhat different which might be related to alignment problems and missing calibrations.
- Track-time distributions look different with respect to 2015. Maybe t0 of the trigger is wrong (unlikely, Moritz is regularly updating trigger time calibrations).

4) Marcia – DPS and alignment

- Discussion on UE11, either to use or not specific settings for selected detectors or to use standard setting for all. A suggestion is to look into documentation and examples.

- Some discrepancy between UE11 residuals and alignment monitoring and alignment residuals e.g. for DCs (DC0, DC4).
 - Suggestion is to run UE11 on physics data and check if the residuals change when comparing with UE11 results with alignment data.
- For GEMs timing is strongly shifted (wrong calibrations) it seems that GEM04 is misaligned (GEM04 is a pivot!). Rather puzzling. Tracking contribution to the residual?
- Sergei - how to get best estimator of the track on the plain excluding the impact of the plain (less biased pseudo-efficiencies)? Would be useful to get for a given detector ID the smoothing point excluding the hits from this detector (if they exist). Sergei will check how to implement this option.
- MMs, some problems that can be solved.
- SciFis also can be slightly improved alignment-wise.
- Should we review the number of hit requirement for SciFis? Average number of hit is 10 and requirement is 8 hits per track, but is it OK? If detectors have overlapping inefficient ranges, 8 hits requirement can just “exclude” those ranges artificially amplifying those inefficiencies.