

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

### Communications:

- Production is running quite effectively (> 10000 simultaneously running jobs)
  - This caused problems with MySQL-DB server
  - Slowing down production system and monitoring
  - Martin will request more powerful server
  - Migration from MySQL to SQLite (Martin and Matous)
- Strange problem with P09-t4 (number of accepted random-triggers is larger than the number of attempted RT) was explained by production system glitch (bug). Same spill can be merged in two different files, so that same events can enter twice in the same run if mDSTs are analyzed separately.
  - General, standard suggestion is to run PHAST on run-by-run and not file-by-file basis.
- Another strange production-system glitch - unnoticed lost jobs. Sometimes jobs are being killed (by HTCondor?), but without any notice at the level of production system.
  - The request/solution is still the same - to implement “initial/final N of events”-check.
- Caroline will move 2 remaining DY periods and also DVCS-2016 periods.

### 1) Artem – production system

- By mistake (Riccardo) BW site production jobs were connecting to our CERN MySQL-DB (before it was not known that nodes can have connectivity to outside world).
- In contact with BW management for production system integration
  - With help of Danila and BW-support team it was clarified that high CPU-usage was due to external process doing archiving of the logs. It was running on the login-clients and was using CPU. This service was disabled and high CPU usage problem has been solved.
  - Currently tests with modified pilots are running.
- Investigating aforementioned bugs (double spills, unnoticed lost jobs)
- Working on status-checking acceleration (main reason which slows down the monitoring)
- New hardware server for production-system is requested.
- PanDA-server might need to be updated.
- Request to use provided text-files with number of events info on run-by-run basis or to try to send less requests for ORACLE-DB (less requests, but more info requested, e.g. N events for all chunks of a given run).
- Staging of files is now done not file-by-file, but run-by-run, which boosted a lot the staging efficiency.

### 2) Elena – alignment 2016/2017

- Antoine has found that the peak of E-miss distributions for exclusive  $\rho^0$  production are shifted for  $\mu^+$  and  $\mu^-$  (in P09-t1) and in P07-t4 the shift is present only for  $\mu^+$ , the shift is present also in P09-t4.
  - The problem comes from BMS-time-calibrations and as a consequence wrong beam-propagation-coefficients (BPCs). In some cases BPCs were evaluated from the scratch in some cases default values were used. This differences cause the observed shifts. The suggestion is to determine BPCs separately for  $\mu^+$  and  $\mu^-$  and for each period and to cross-check with Pawel.
- DPS studies have been performed for 2016/2017.
- SciFis in 2017 look fine, some minor corrections are needed. Problem with time distribution for FI03-U, maybe related to wrong calibrations (to be clarified with Rainer).
- Problem with GEM/pGEM 2017-calibrations (known since March). Incorrect format for GEMs and wrong values for pGEMs. Experts were contacted, no news.
- Micromegas look fine, some corrections to be done.
- DC04-Y2 calibrations for 2017 to be checked.
- Straw in 2017 – mostly fine except for some outer parts.

### 3) **Andrea – MC**

- Beam-files are missing in the TGeant repo (currently they are in Andrei's private dir).
- Det.dat files are also not updated in repo.
- It was decided to store on CVMFS also MC-production directories (CORAL+TGeant+option files etc.), i.e. to have something similar to what we have for RD-productions (production directories with CORAL, option files etc.).
- The folders are heavy enough (~ 200 MB) beam files are about 1 GB.
- Ladder-trigger problem (gaps between slabs) is still not clarified, studies are ongoing. It was clarified that in TGeant the description is done correctly without any gaps.