"pass1" readiness review

March 7, 2018

Data Processing Readiness Review

- Tools and procedures:
  - Run list
  - Cooking tools
  - Data management plan (staging area, tape destination, directory structure, logs, software triggers for event reconstruction, ...)
  - Definition of
  - Monitoring (check data quality in real time, identifying cooking failures, …)
- Calibration & Alignment:
  - Quality with respect to expected performance
  - Stability vs. run (pass0 results)
- Reconstruction:
  - Efficiency and resolution with respect to expected
  - Performance stability vs. run (pass0 results)
- Analysis:
  - Readiness of skims definition and train setup
  - Results from partial cooking (5%?) for main reaction channels
  - Verification of all ancillary information (helicity, Faraday Cup, …)

Calibration/Reconstruction checks

1. Require checks that all relevant subsystem calibrations are acceptable for all runs in the calibration

2. range including system averages and channel-by-channel

3. Check relative timing between subsystems (or subsystem timing with respect to ST)

4. Verify PID in beta vs. p for positives and negatives in the Forward and Central Detectors

5. Verify PID for neutrals in ECAL, CND, and BAND

6. Verify PID for electrons and photons in FT

7. Verify helicity and Faraday Cup charge signals

8. Check forward and central tracking efficiencies including tracks per event (pi,p)

9. Check electron, proton, and pions yields per sector in the Forward Detector and pion and proton yields

10. in the Central detector normalized per FC charge

11. Check reconstructed vertex distributions vs run number

12. Check W distribution and verify electron ID in EB for electrons in ECAL and FT

13. Check pi0 distributions (mean, sigma) sector by sector in ECAL and for pi0 in FT

14. Check MM and IM distributions for select reactions to check resolutions

15. ....

Data Processing Readiness Review

- Ad-hoc committee:
  - 5 people selected among Collaborators
  - standing committee in charge for 1-2 years?
  - Calibration, reconstruction and software experts
  - 1 day review with presentations
  - Committee recommendations to be addressed before data processing can start