



## **Readiness Review for “PASS-X” cooking of CLAS12 data**

Cooking any CLAS12 data set is a computing-intensive process requiring detailed planning and preparatory work to guarantee the output data quality. For this reason, a “readiness review” is requested to authorize the start of the reconstruction data processing of any data set that makes a formal request for cooking to the CCC. The charge for this review is outlined below.

The review committee is requested to answer the charge questions based on the material presented by the Run Group and report its findings, comments, and recommendations to the CLAS Coordinating Committee.

### **Review Charge:**

Charge #1: Is the quality of detector calibration and alignment adequate to achieve the performance specifications foreseen for CLAS12 or achievable at the current time, given the “state-of-the-art” calibration, alignment, and reconstruction algorithms?

Charge #2: Is data quality as a function of run number or time for the data set proposed for cooking stable and understood? Have runs been classified in terms of type (empty target, calibration, special, production, ...) and quality (golden run, known issues, ...), and is a detailed list available? Based on validation studies, have all CLAS12 subsystem performances been understood and issues identified?

Charge #3: Has a ‘Hardware (HW) status table (i.e., bad channel table) been compiled for use in the data and MC reconstructions? Has the efficiency versus beam current been studied? How does it compare to MC simulations with the merged background? Are the DAQ translation tables correcting for all known cable swaps? At what stage(s) in the software?

Charge #4: Are analysis plans for the data set developed at adequate levels? Is the list of planned skims defined and tested running the analysis trains on preliminary data? Is all ancillary information (helicity, Faraday Cup, ...) available and understood?

Charge #5: Are the data processing tools that will be used adequate for the proposed processing task? Is the data management plan (staging area, tape destination, directory structure, logs, ...) defined and appropriate given the available resources? Is the estimate of processing time per event available and resources needed to complete the task sound?

Charge #6: Have the tools for monitoring the quality of the cooking output and identify/correct failures been defined and ready to be used?

Charge #7: Is the person-power identified and in-place for the proposed data processing?