

Task forces

CLAS12 future trigger/DAQ

Goal

to verify if it is possible and how to improve current CLAS12 trigger/DAQ scheme and run an online reconstruction

Charge

- Assess the current CLAS12 DAQ/Trigger configuration and identify the limiting factors
- Assess existing DAQ alternative technologies (eg streaming RO) and identifying the most suitable to upgrade CLAS12
- Quantify the expected improvement (DAQ rate, on-line monitoring/rec, trigger algorithms implementation)
- Evaluate in details the effect of implementing a L3 trigger and implications to streaming path
- Identify changes in the current scheme and resources needed to implement a CLAS12 online monitoring/reconstruction
- Define a work plan to test the proposed solution with a time chart and milestones for:
 - 1) required R&D (if any);
 - 2) required test in the current run configuration
 - 2) prototyping
 - 3) full implementation
- Estimate costs and identify resources needed in the different phases of the project
- Evaluate synergies with other projects at the lab providing a list of shared resources and common goals

Resources

- Time: 5 months (Feb-June)
- Deliverable: 2 page reports, wiki page with full documentation and minutes of meetings/presentations
- Task force: S.Boyarinov (co-PI), G. Heyes (external, co-PI), V.Kubarovsky (core), New-hired (core), N.Baltzell (core), G.Gavalian (external), B.Raydo (external)
- External advisors: B. Sawatzky, S. Wood