

Online software as part of CLAS12 software

Sergey Boyarinov

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CLAS experience

- Code management (two systems)
- Data file format (online vs offline)
- Data processing (two versions)
- Two teams

CLAS12 approach

- One code management system, extra protection for online-related packages ('online' tag, freeze for run period, merge after etc)
- Data file format will be recommended by online group but chosen by offline community
- One solid set of reconstruction software used online and offline, with online-related requirements applied to all or at least core packages such as pattern recognition and tracking (multi-threading, ET system as multi-computer communicator, portability into online framework and conditions, online calibration procedures etc)
- Dual-use packages: event display, histograms (again: ET system)
- Two groups, but one software team: do not argue about differences, concentrate on projects of common interest (define set of classes people can start to implement etc)
- One architect ?

Some online group software activity

- Pattern recognition for CLAS12 trigger system (calorimeter cluster finding, drift chamber segment and road finding, different detectors matching)
- Online reconstruction package support (all in C, multi-threaded, ET system based)
- ROOT presenter on ET system (collects and displays histograms produced by different online system components)