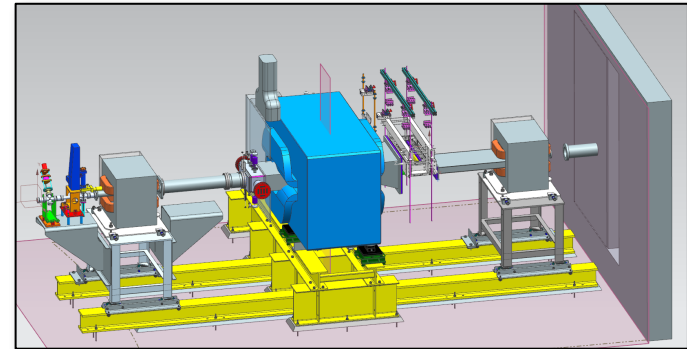
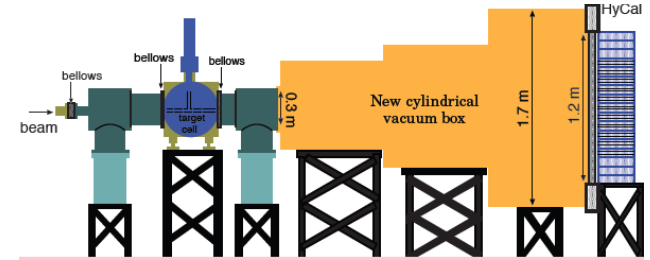
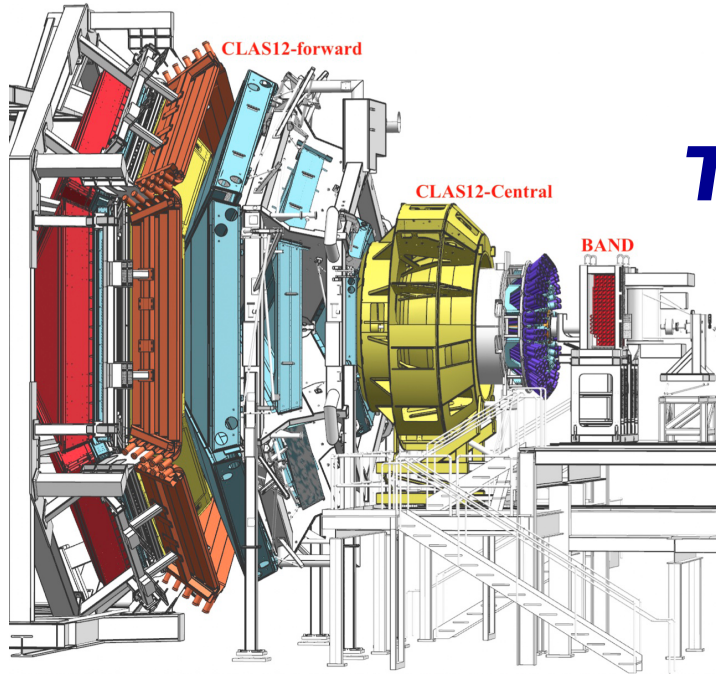


CLAS Collaboration Meeting
July 21-24, 2020

Hall-B Task Forces

Marco Battaglieri
Jefferson Lab



Task Forces

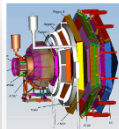
- Forward tracking
 - Central tracking
 - New polarised targets
 - *Future CLAS12 Hi-Lumi*
 - Future CLAS12 PID
 - *Future CLAS12 Trigger/DAQ*
 - CLAS12 software development
 - *AI support to CLAS12 sw*
 - CLAS12 data preservation
 - Physics analysis framework
 - GEMC for streaming RO
 - Novel tracking technologies
 - BG merging
 - RG-L (ALERT) integration
 - Regular report on Friday meeting (8/14)
 - Documentation available on wiki pages
- * These TFs have been recognised of interest for a lab-wide effort*

Who

- 3-4 core group + 1-2 staff contribution (staff + Bridge/Joint associates)
- CLAS12 Users as consultants

How

- Clear charge and defined timeline to complete the study
- Assessment, existing issues, path forward, work-plan to identify timeline and resources needed
- Short report at the end used to steer future resources (human and capital) allocation
- Regular weekly meeting with short presentations (rotating) and focused discussion (Friday's TCB slot? other options?)
- WEB resources for minutes/material
- All staff is strongly encouraged to attend and contribute



Navigation
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Hall-B Task Forces 2020

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This is the wiki page for the 2020 Hall-B task forces, including meeting info, agendas, and minutes, and any related documentation, timelines, final reports. Each task force has its own tab above. Here is

[Overview](#) [Analysis Framework](#) [Central Tracking](#) [Data Preservation](#) [Forward Tracking](#) [Novel Tracking](#) [Polarized Targets](#) [Particle ID](#) [Software](#) [Streaming GEMC](#) [BG Merging & Efficiency](#)

Goal

To identify issues in current CLAS12 forward tracking and propose a path forward to obtain the maximum efficiency, resolution, and speed.

Members

- Daniel Carman (PI)
- Veronique Ziegler (core)
- Mac Mestayer (core)
- Maurizio Ungaro (external)
- Dave Heddle (external)
- Maxime Defurne (external)
- Maxence Vandenbroucke (external)

Documentation

- Kick-off meeting outline [5] [📄](#)
- HADES drift chamber poster [6] [📄](#) (time-over-threshold technique)
- COMPASS Micromegas detector [7] [📄](#)

Charge

- Assess the current CLAS12 forward tracking efficiency, resolution, and execution speed
- Assess limitations in hardware, reconstruction software, calibrations, tracking algorithms, ...
- Quantify the expected improvement in efficiency, resolution, and execution time provided by the proposed solutions
- Define a work plan to more forward provide a time chart and milestones for:
 1. Assessment
 2. Definition of alternative solutions
 3. Validation (data and Monte Carlo)
 4. Implementation in the current reconstruction framework
- Estimate 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

Meetings

February 17, 2020

- Agenda: Kick-off meeting of core task force members
- Minutes: [8] [📄](#)

March 9, 2020

- Agenda: Review near term, medium term, long term tasks from the last meeting and discuss next steps
- Minutes: [9] [📄](#)

April 2, 2020

- Agenda: Review status of report preparation and preparations for initial presentation
- Minutes: [10] [📄](#)
- Group Presentation Slides: [11] [📄](#)

April 23, 2020

- Agenda: Review status of report, manpower estimates, high priority tasks, next steps
- Minutes: [12] [📄](#)

https://wiki.jlab.org/physdivwiki/index.php/Task_Forces_2020



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This is the wiki page for the Experimental Physics Division's 2020 task fo

Credit: N.Baltzell

Status

- Started the second round with final report discussion
- Some TF already provided a 2pg report + long document with details

100% Forward tracking

100% Central tracking

80% New polarised targets

75% Future CLAS12 Hi-Lumi

75% Future CLAS12 PID

100% Future CLAS12 Trigger/DAQ

100% CLAS12 software development

100% AI support to CLAS12 sw

70% CLAS12 data preservation

50% Physics analysis framework

100% GEMC for streaming RO

50% Novel tracking technologies

100% BG merging

- RG-L (ALERT) integration

Today

- AI support to CLAS12 SW (G.Gavalian)
- Forward tracking (D.Carman)
- Central tracking (Y.Gotra)

Wednesday

- Bg merging (S.Stepanyan)

Friday

- Data Preservation (H.Avagyan)