COMMUNITY STANDARDS

Welcome to Jefferson Lab!

Everyone at Jefferson Lab has a responsibility to foster an environment where all employees, users, students, guests, visitors, and subcontractors feel safe, welcomed and supported in advancing the Lab's mission.

DIVERSE IN COMMUNITY
United in Science

While it is not possible to provide a complete list of the types of improper behavior below, prohibited conduct includes, but is not limited to:

- Offensive verbal comments
- Bullying or deliberate intimidation
- Stalking/following
- Repetitive photography of the same person(s)
- Gender-based insults
- Displaying or circulating sexually suggestive materials
- Inappropriate physical contact
- Unwelcome sexual attention or advances

Everyone is expected to embody the values of professionalism, respect, and diversity as well as cultivate a supportive and inclusive environment where the opinions of others are embraced. Behaviors not aligned with the lab's values will not be tolerated. Failure to adhere to this Community Standard may result in being barred from further lab events, suspension of site access including housing at the SURA Residence Facility, and/or removal from the site.

Hall A/C Status

June 2025 Hall A/C Summer Meeting

Mark Jones
Hall A/C Group Leader

Dave Gaskell
Hall A/C Deputy Group Leader

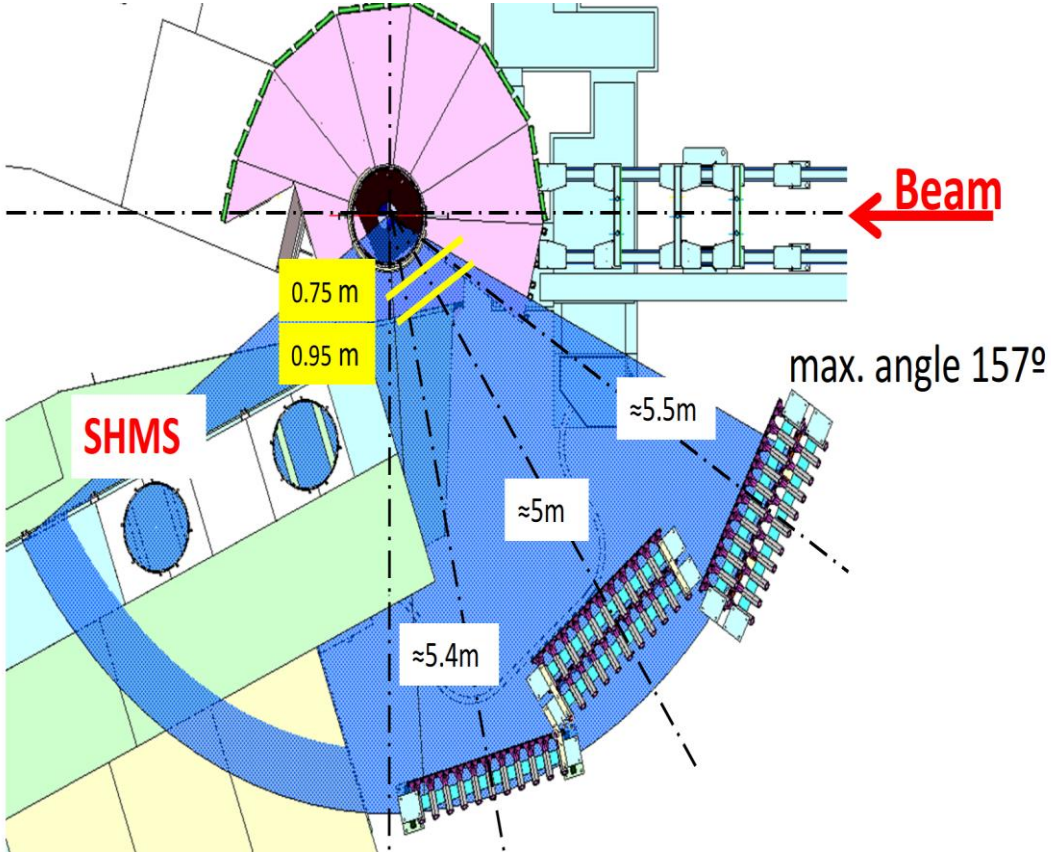
Hall A and C present status

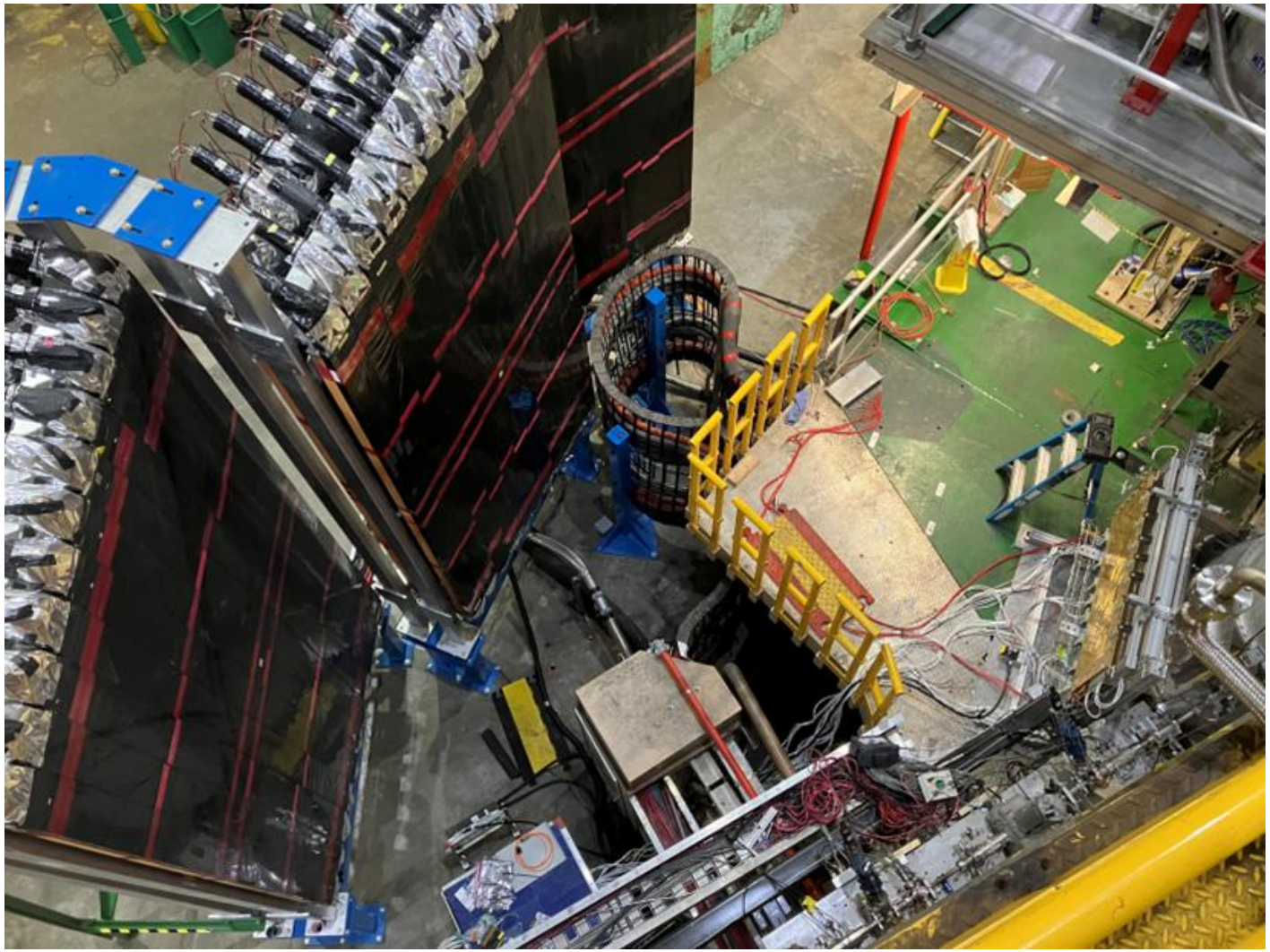
- Physics beam delivery started on Wed April 2nd to Hall C and D. Hall A started one week later.
  - Both Hall A and C needed 3 pass beam energy started with commissioning.
- Hall C started with E12-11-107 Spectator tagged DIS d(e,e'ps)
- Hall A started with lowest Q^2 for the GEp experiment
- Hall C had a major event with short at the main switch board.
  - Took 3 weeks to repair the switchboard and transformer.
  - Then had additional problems at switchboard which took about 6 more days to fix.
- Hall C E12-11-107 extended to July 14th. Then run R-SIDIS E12-06-104/E12-24-001
- Hall A presently at the highest Q2 = 11 GeV^2
- Scheduled beam time shorten from 25 weeks to 20> Now back to 22 weeks for this FY25.
  - Hall A will run until Monday Aug 25th at 7am
  - Hall C will run until Wednesday Sept 3rd at 7am

Hall C: Currently Running in Hall C

E12-11-107 Spectator tagged DIS d(e,e'p_s)

- Install Large Acceptance Detector to detect the spectator proton
- HMS/SHMS detect DIS electron
- Scattering chamber rotated
- 20cm LH2 target with opening for 157 deg



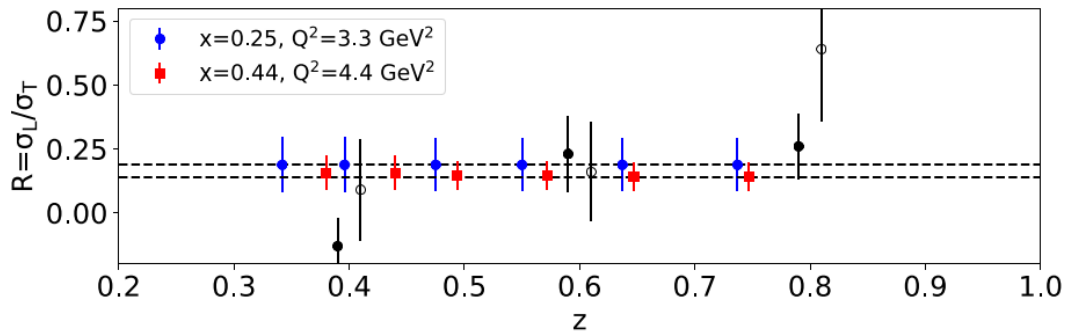


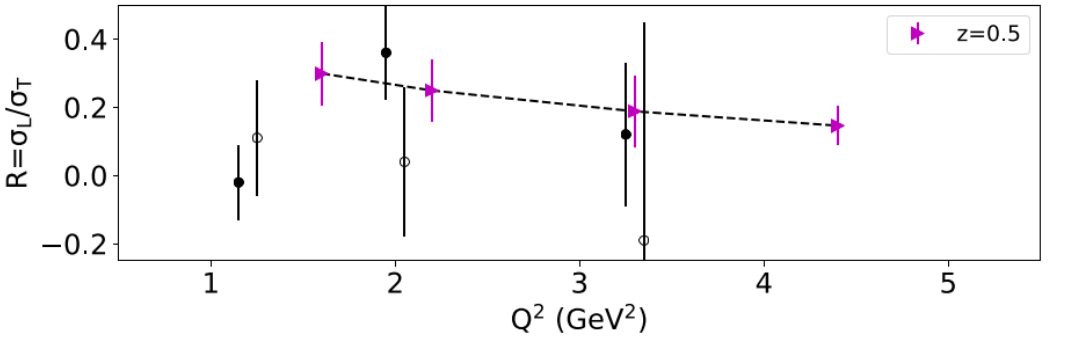
Hall C: Next experiment in the current run period

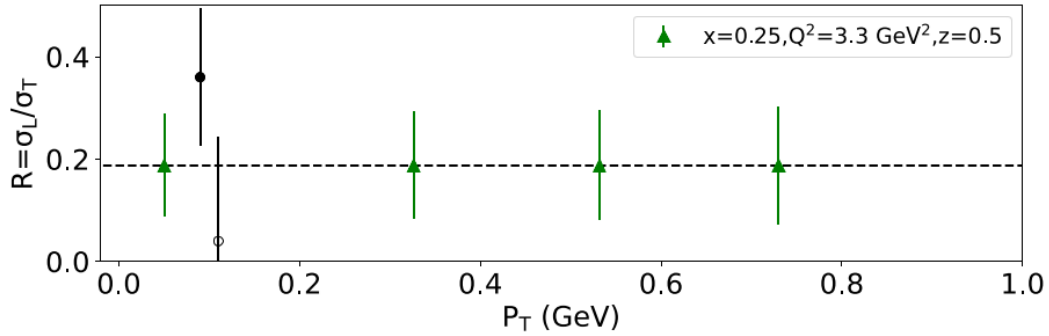
- E12-06-104 $R=\sigma_L/\sigma_T$ in SIDIS on 1H and 2H
- E12-24-001 Nuclear Dependence (C,Cu) of R in SIDIS

- Complete about 40% of experiment by Sept 3rd 2025.
- Will complete rest of the experiment in FY26 run period.

- Verify whether $R_{SIDIS} = R_{DIS}$.
- Check the z-dependence of R from the semi-inclusive to the exclusive region.
- Verify that R_{SIDIS} anneals to R_{DIS} at large p_T.
- Verify if R_{SIDIS} follows the Q^2 dependence of R_{DIS}, at two values of x.
- Verify that $R^{\pi^+}_{SIDIS} = R^{\pi^-}_{SIDIS}$ and $R^{H}_{SIDIS} = R^{D}_{SIDIS}$.
- With a factor of ten reduced statistics: map R^{K+}_{SIDIS} and R^{K-}_{SIDIS}.







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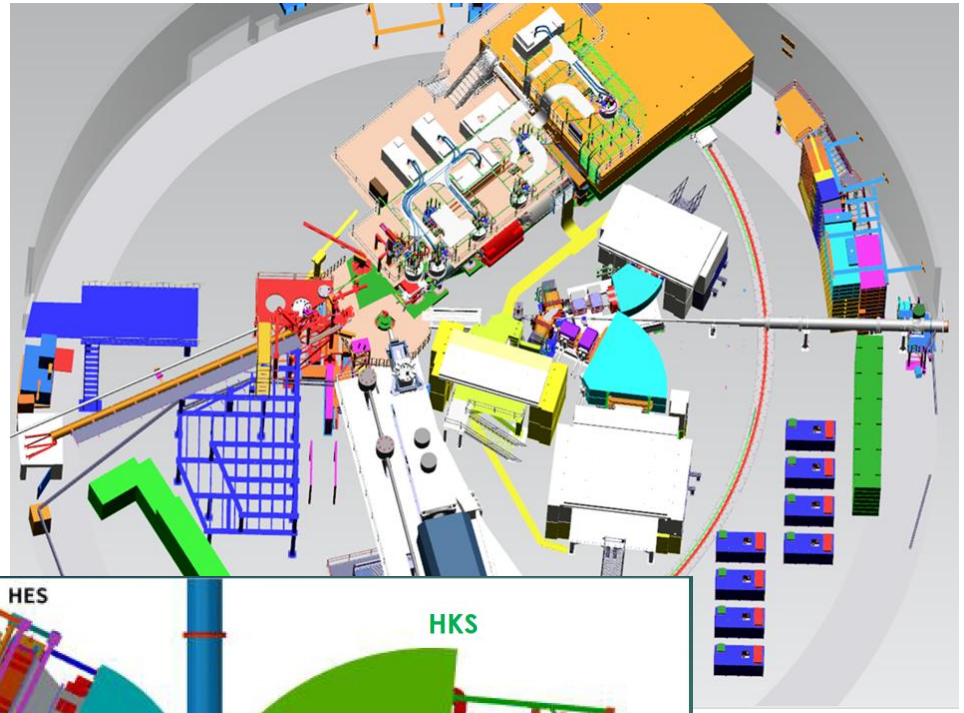
Near future Hall C schedule

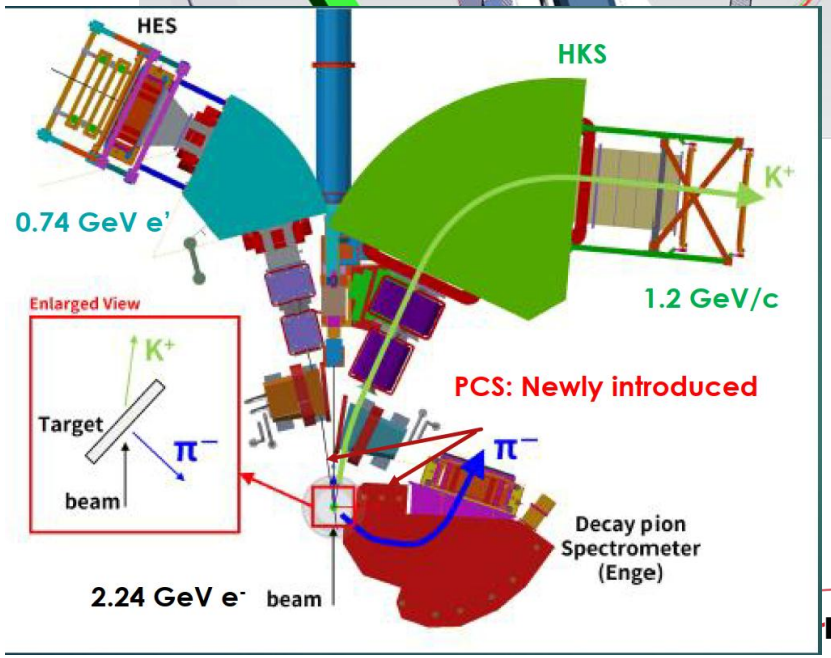
- FY26 assume 22 weeks
- Draft schedule beam start in late Jan 2026 run to mid June 2026.
  - E12-22-001 N-Delta at low Q^2, Special beam energy to match Hall B.
  - E12-23-001 VCS at low Q^2, Special beam energy to match Hall B. (only 15 of 61 PAC days)
  - Complete E12-06-104/ E12-24-001 R-SIDIS
  - E12-06-107 Pion Color Transparency
- Run schedule in FY27 is still being determined.
  - Run standard HMS/SHMS experiments. Possibilities:
    - Complete VCS experiment
    - NucR and complete KaonLT non-standard beam energies
    - E12-23-010 Color Transparency in Maximal Rescattering Kinematics
    - E12-20-007 Backward-angle Exclusive pi0 Production above the Resonance Region
- Hypernuclear installation in 2027
- Followed by experiments using polarized ammonia targets: E12-13-011 The Deuteron Tensor Structure Function b1; E12-15-005 Measurements of the Quasi-Elastic and Elastic Deuteron Tensor Asymmetries; PR12-24-002 Exploring the Transition Region of QCD with the Proton's g2 Spin Structure Function

Hypernuclear experiments

- Experiments had ERR in Nov 2024. Much work is needed to pass the ERR. See report.
- Experiment PAC days. Total 149 PAC days. Assuming 50% efficiency that is 42 weeks. Two run periods.
- Aim to install in 2027.
- MOLLER will be running in Hall A during the time that Hypernuclear experiments would run.

Experiment	Title	PAC Days
E12-23-013	An isospin dependence study of the Lambda-N interaction through the high precision spectroscopy of Lambda hypernuclei	55
E12-24-011	Study of a triaxially deformed nucleus using a Lambda particle as a probe	28
E12-24-003	Studying Lambda interactions in nuclear matter with the ^{208}Pb(e,e' K+)$^{208}{}_{\Lambda}$Tl reaction	42
E12-24-004	Study of charge symmetry breaking in p-shell hypernuclei	24
Run Group	High-resolution spectroscopy of light hypernuclei with the decay-pion spectroscopy (ENGE magnet)	N/A





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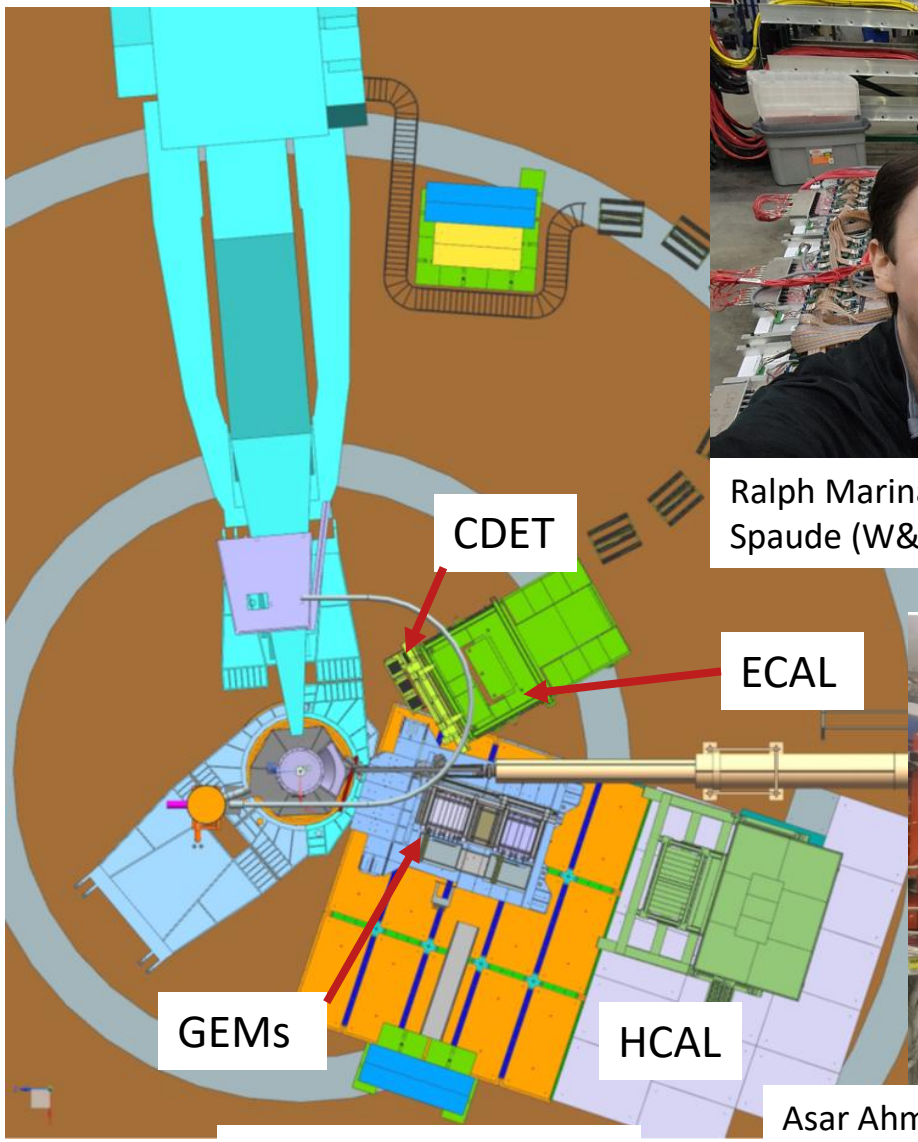
Overview of SBS GEp installation



GEM DAQ bunker

Ralph Marinaro (CNU postdoc) and Ben Spaude (W&M grad) on CDET

Lots of people doing the signal and HV cabling for the ECAL

Asar Ahmed (UVA Postdoc) , Ching Him Leung (Jlab postdoc), Jaocb McMurtry (UVa grad)

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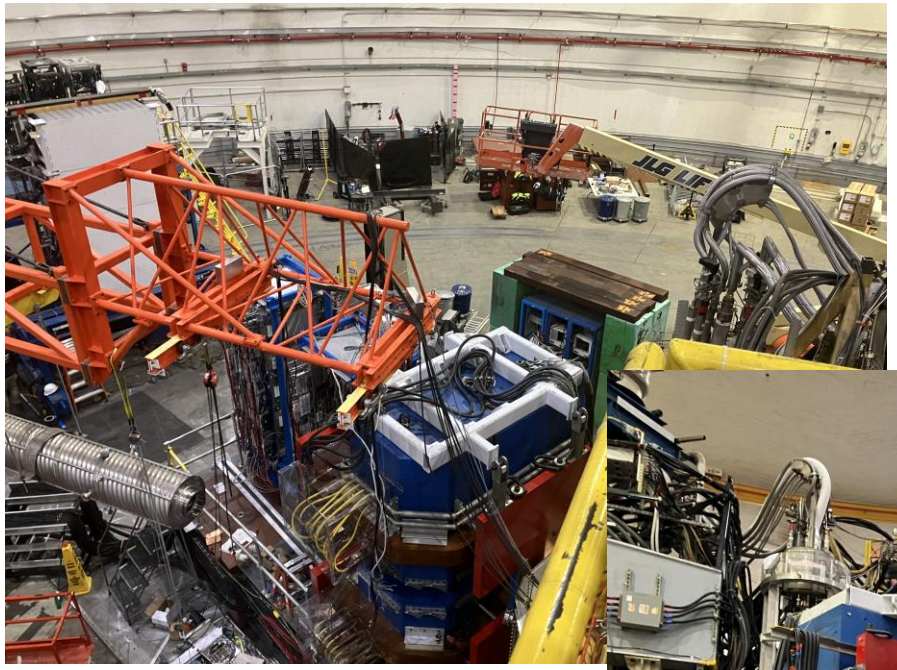
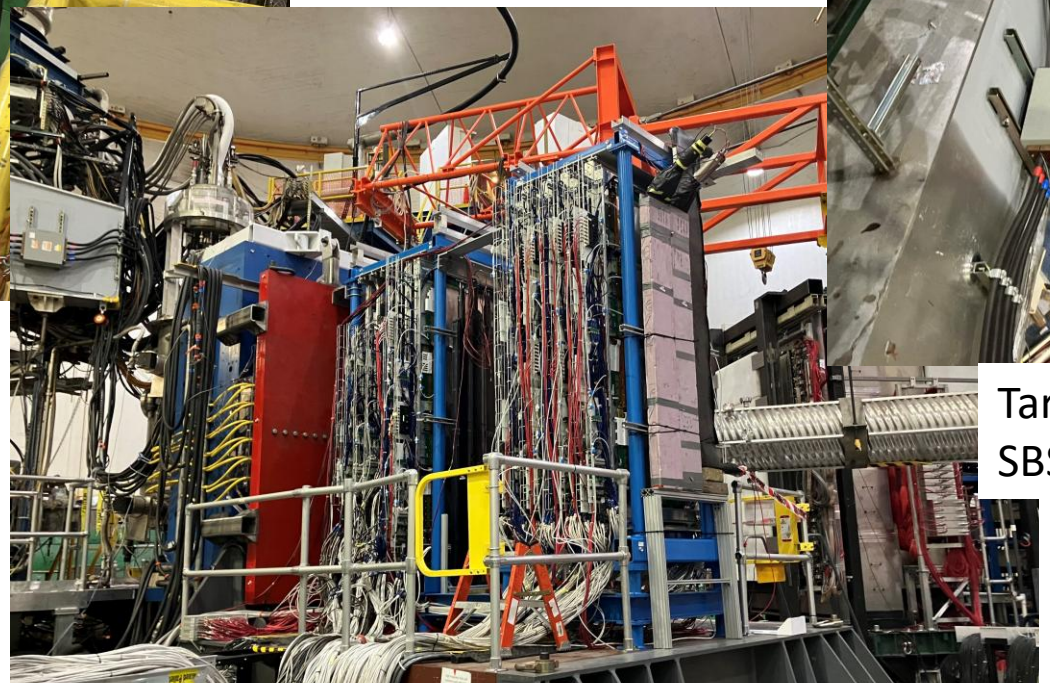
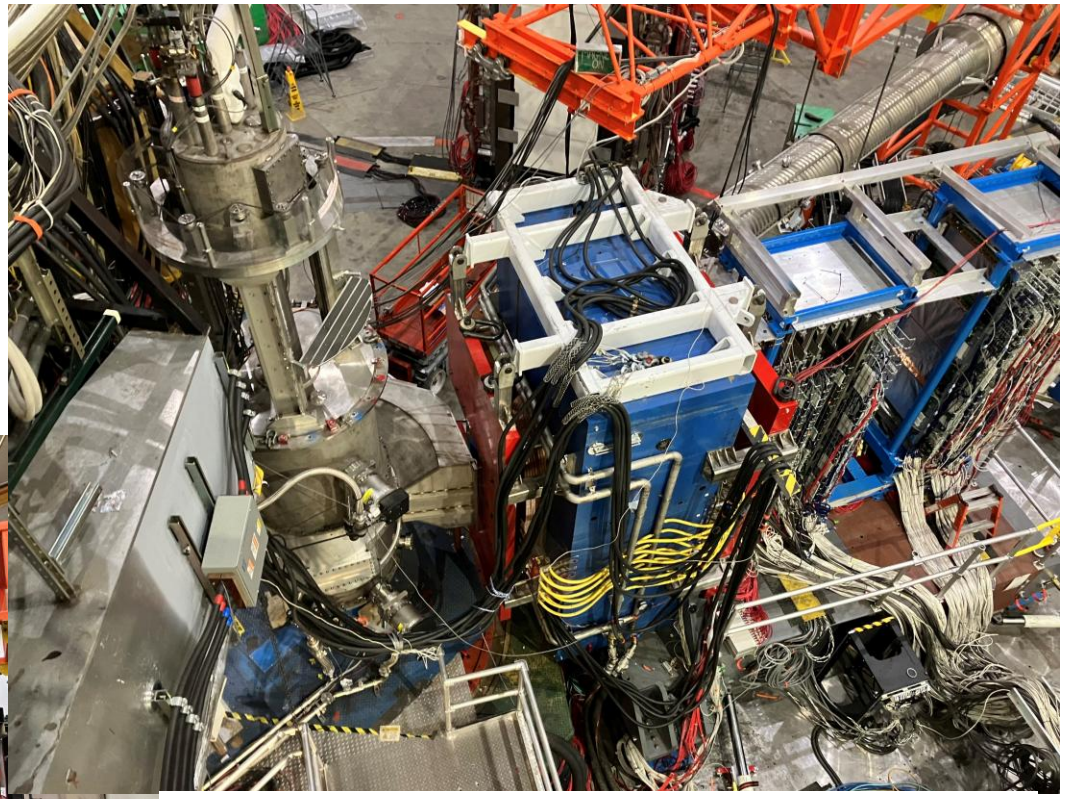
SBS GEM installation

Overview of SBS magnet and GEMs with HCAL.





SBS GEMs on the counterweight

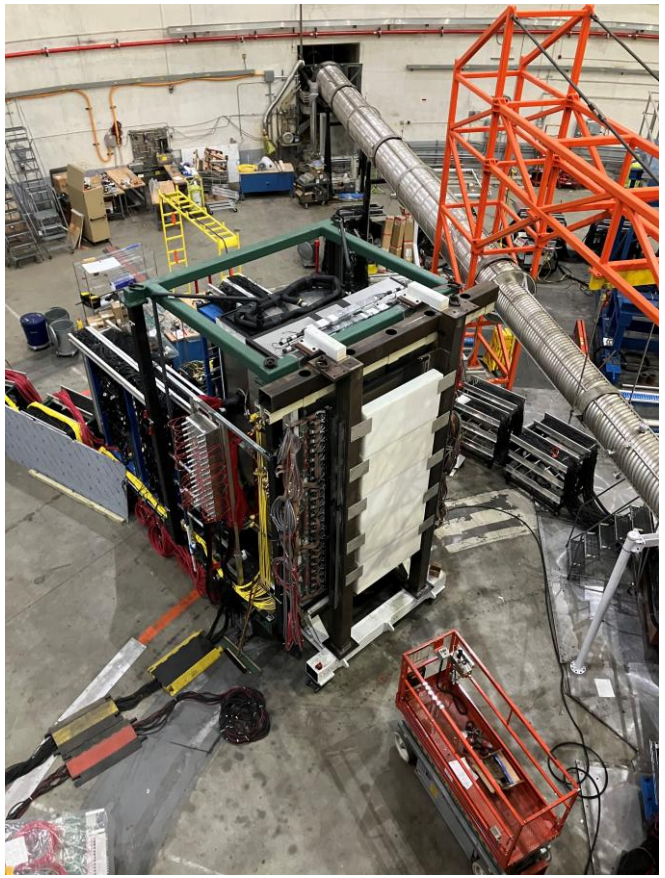


Target chamber with extended snout.
SBS magnet is in 1st kinematic position.

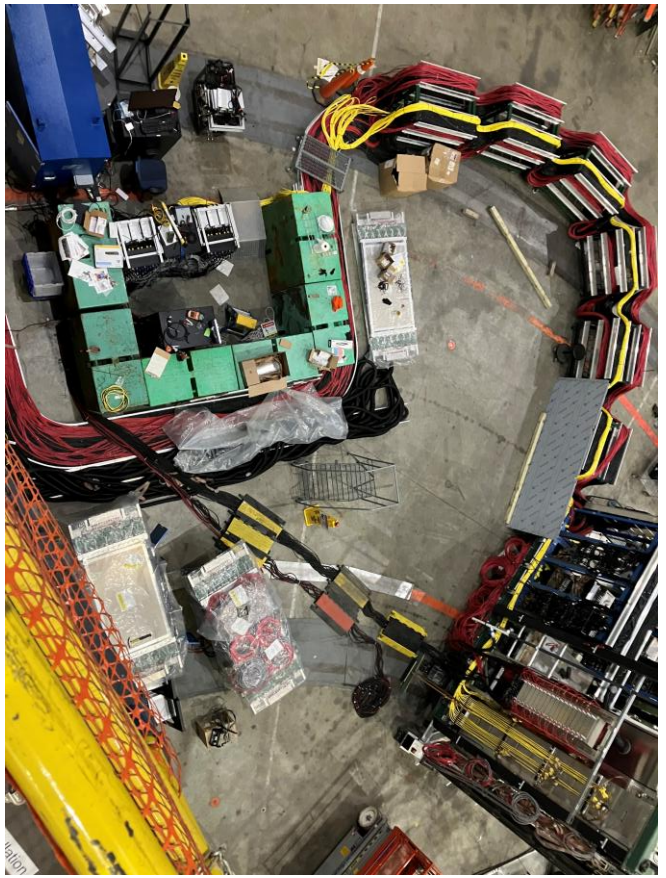
CDET and ECAL installation

Install 1st layer of CDET installed in front of ECAL

ECAL ongoing cosmic tests

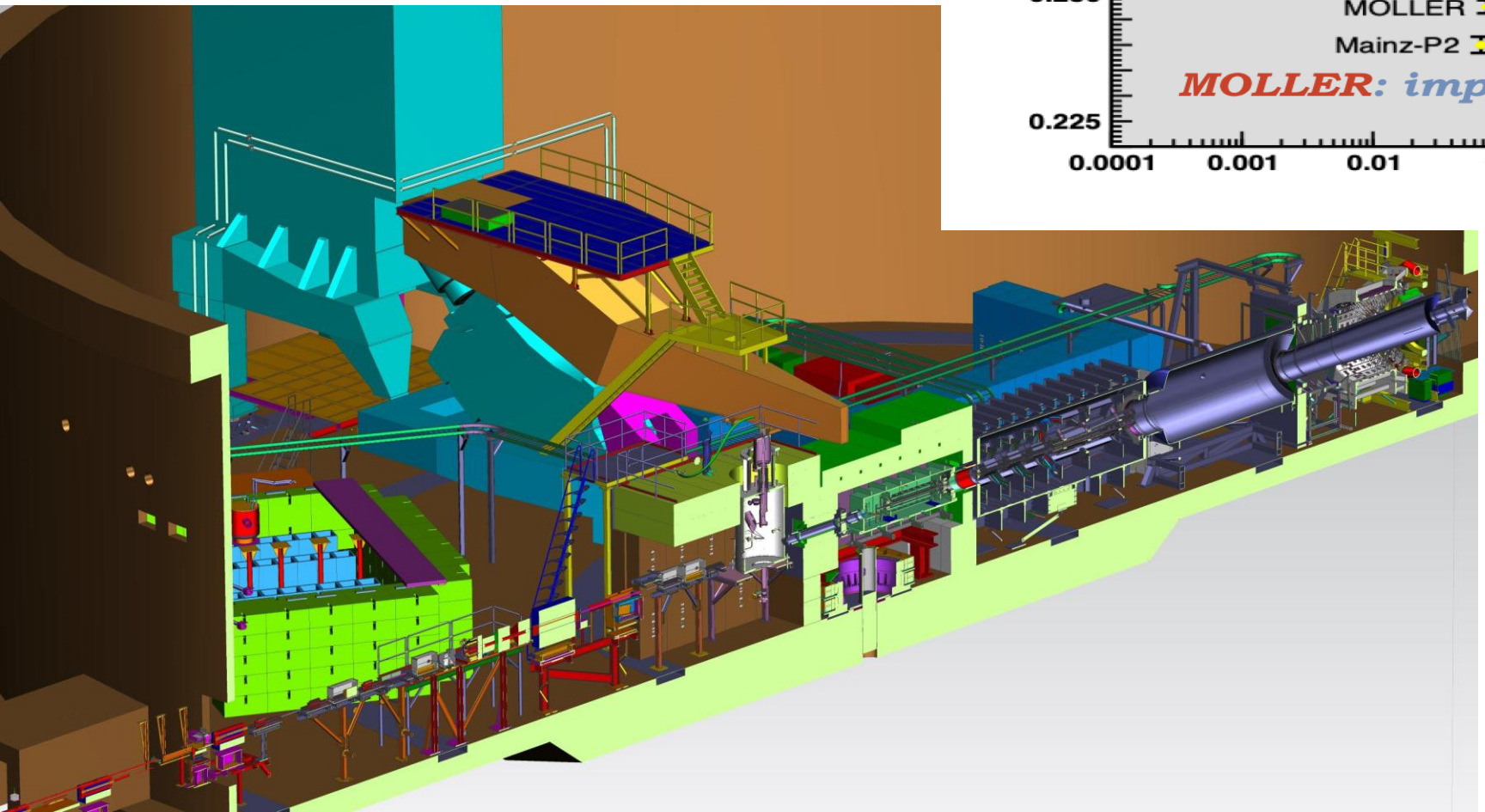


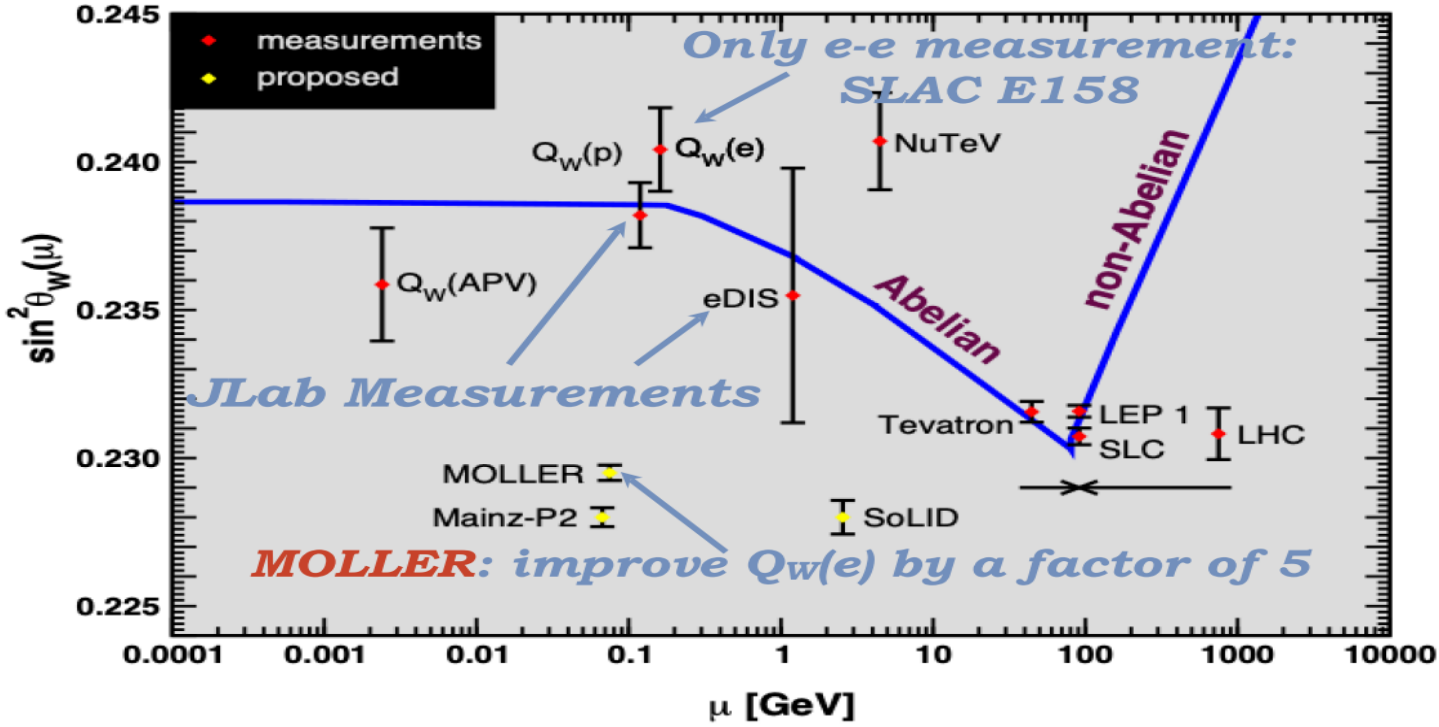
Top view of CDET planes and ECAL



MOLLER Project

- SBS deinstallation starts Aug 25th
- MOLLER installation
- See talks on Wednesday afternoon





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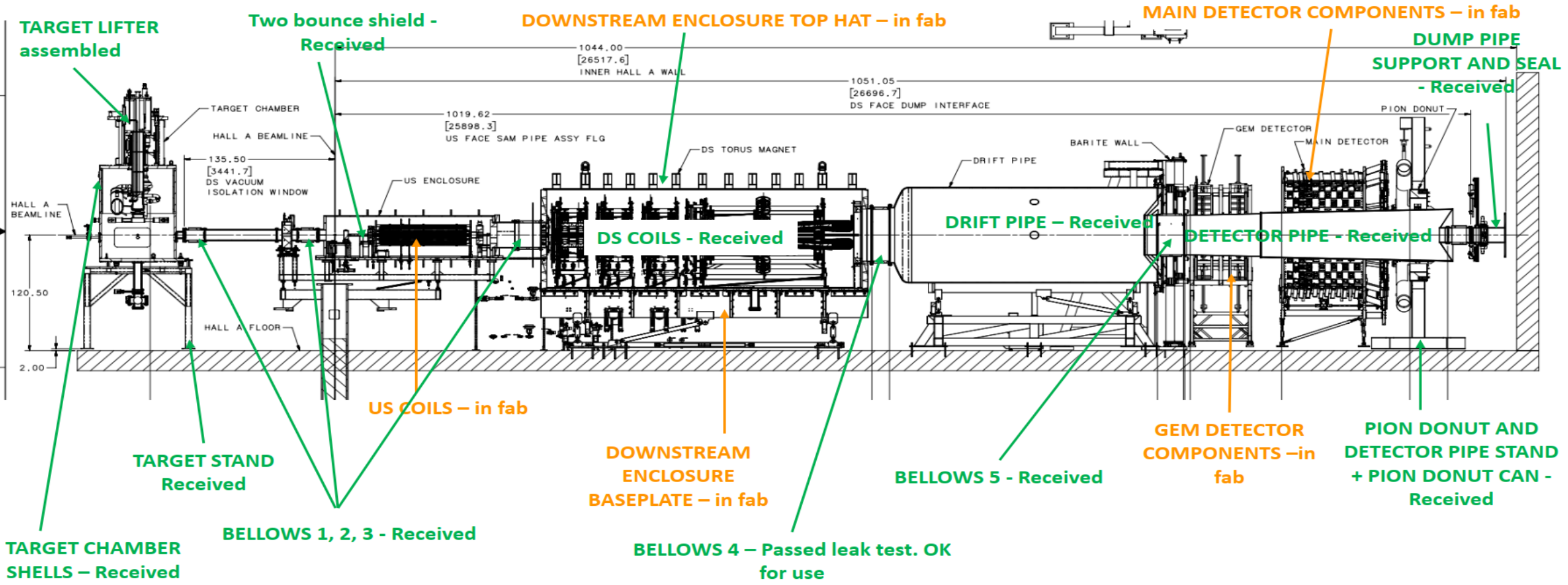
MOLLER Project

- Status of major components for beamline.
- Detector components being delivered to JLab and W&M.



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Steve Lassiter is retiring as Lead Engineer in Hall C

- Steve started at JLab in 1987.
- Devoted to Hall C and maximizing the physics output of Hall C experiments.
- Many large scale installations: SOS/HMS, T20, GEn, G0, HKS, GEp3, SANE, QWEAK, SHMS, NPS, LAD, next HKS.

Steve and Dave Meekins working on the G0 detector.

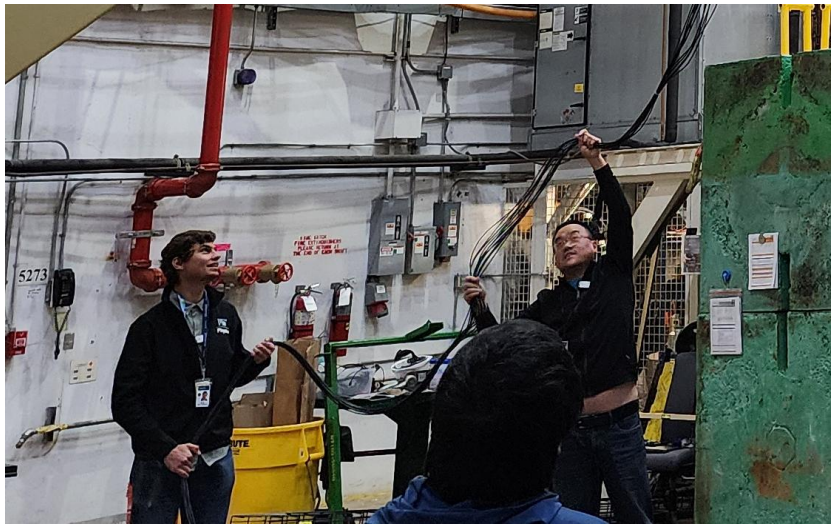
Steve with Paul Brindza, French contractor and Eric Sun with the SHMS

Happy Ending!!

Recognition for outstanding contribution for installation and operations

Kip Hunt

Jhih-Ying Su



Lucas Ehinger

Social event at the ResFac at 5:30-7 today

Beer, Wine and snacks