

Hall C Status

Mark Jones, Hall A/C Group Leader

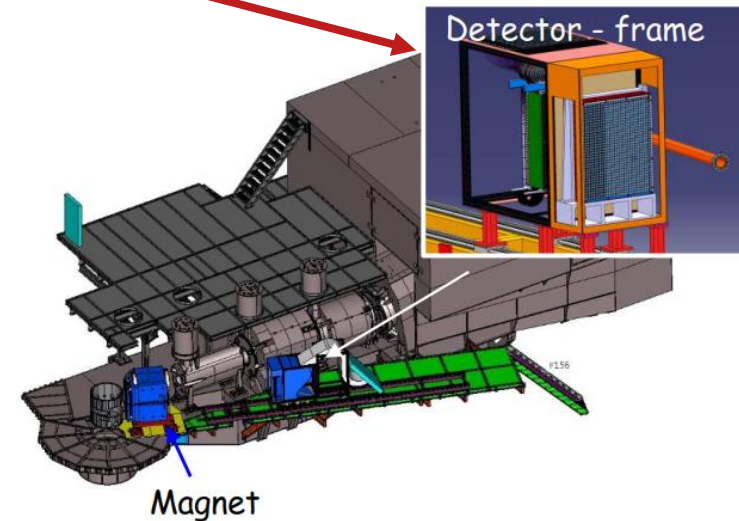
March 2022

Experiments for July 2022- March 2023

1. E12-19-006 : Study of the L–T Separated Pion Electroproduction Cross Section at 11 GeV and Measurement of the Charged Pion Form Factor to High Q^2
2. E12-17-005 : The CaFe Experiment: Short-Range Pairing Mechanisms in Heavy Nuclei
3. E12-10-008 Detailed studies of the nuclear dependence of F_2 in light nuclei.
4. E12-06-105 Inclusive Scattering from Nuclei at $x > 1$ in the quasielastic and deeply inelastic regimes
5. E12-10-003 Deuteron Electro-Disintegration at Very High Missing Momentum

Plan to run the NPS experiments in July 2023 – Mar 2024

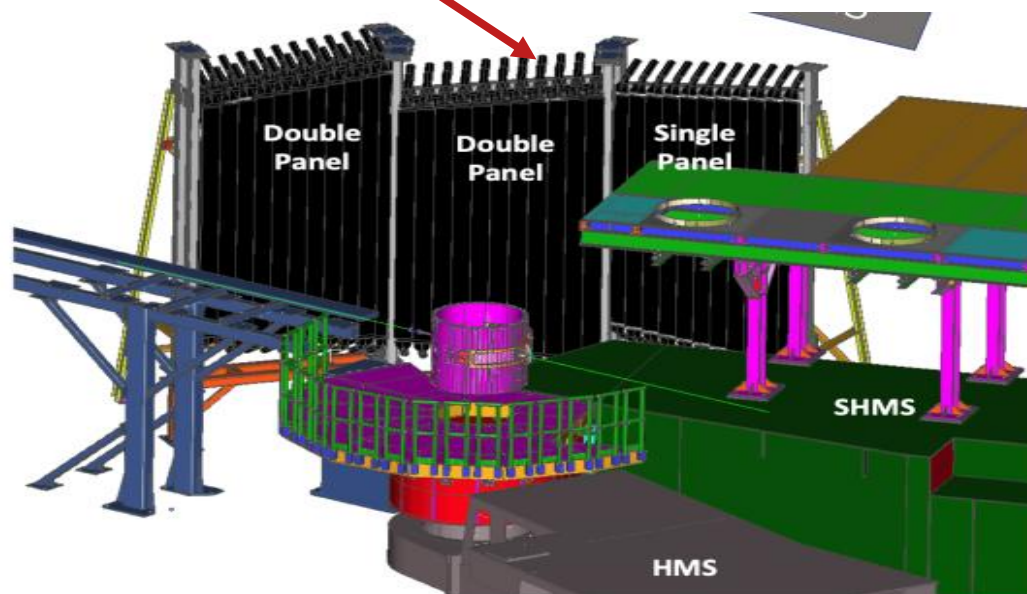
- Install Neutral Particle Spectrometer (NPS) during March 2023 to July 2023 down
- Magnet with calorimeter
 - 1080 Lead-Tungstate blocks in Calorimeter to detect γ and π^0
 - Remove the SHMS HB magnet
- Experiments
 - [E12-13-010](#) is two concurrent experiments
 - Exclusive Deeply Virtual Compton on proton
 - SIDIS $p(e,e',\pi^0)$ cross section. Map the transverse momentum dependence.
 - 53 PAC days.
 - [E12-22-006](#)
 - Exclusive Deeply Virtual Compton on neutron
 - 49 PAC days



Hall C Near term future after March 2024

July 2024-March 2025

- Standard SHMS/HMS
 - E12-06-104 $R=\sigma_L/\sigma_T$ in SIDIS
 - E12-06-107 Complete CT experiment
 - E12-11-107 Spectator tagged DIS $d(e,e'p_s)$
Install Large Angle Detector
HMS/SHMS detect electron



Hall A and Hall C plan 2025 and beyond

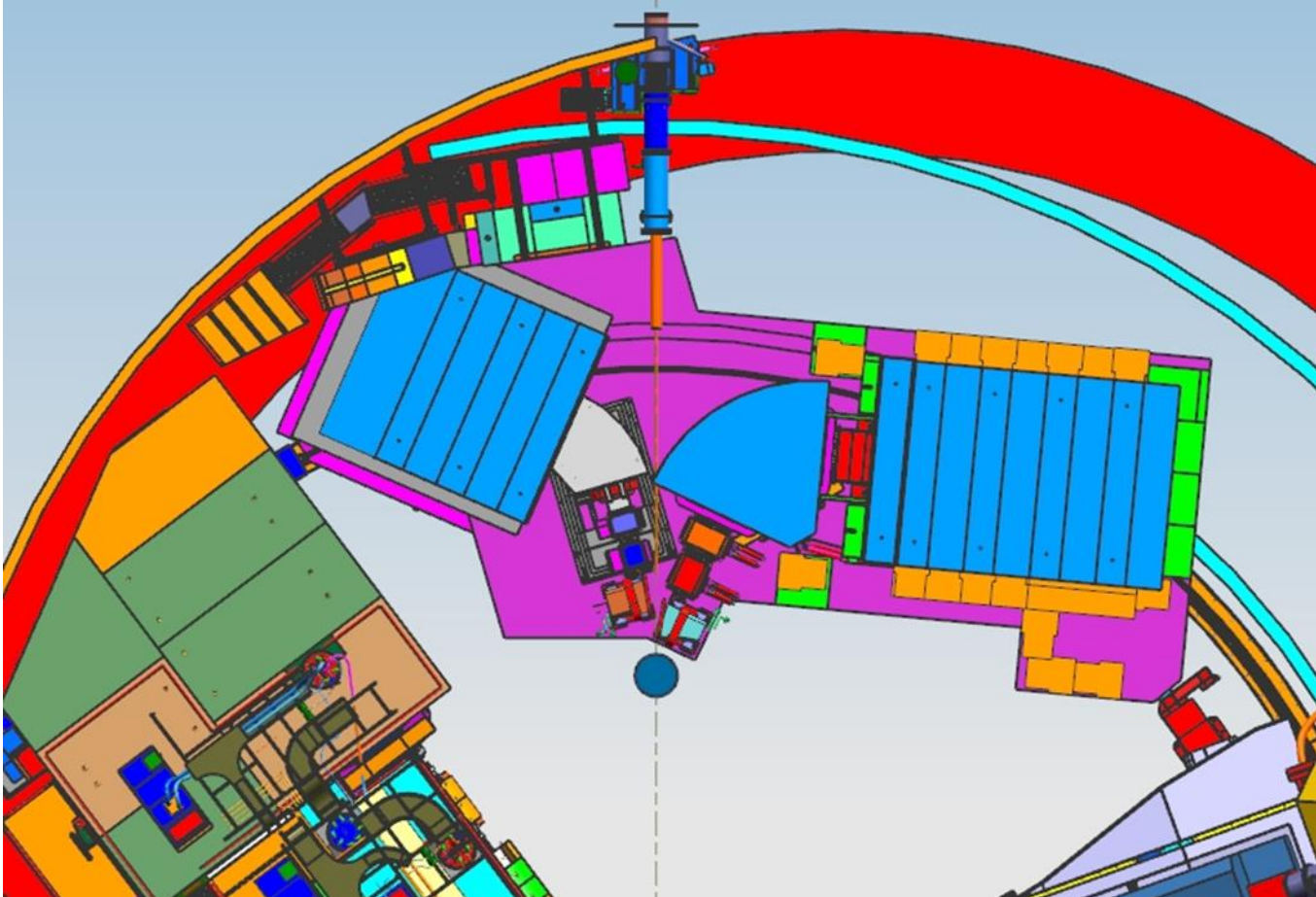
Hall C

- July 2025 to March 2026 : Standard SHMS/HMS experiments
 - End early in Jan 2026 for Hypernuclear solid target installation
- Assume 6 month installation
- Run Hypernuclear from July 2026- March 2027

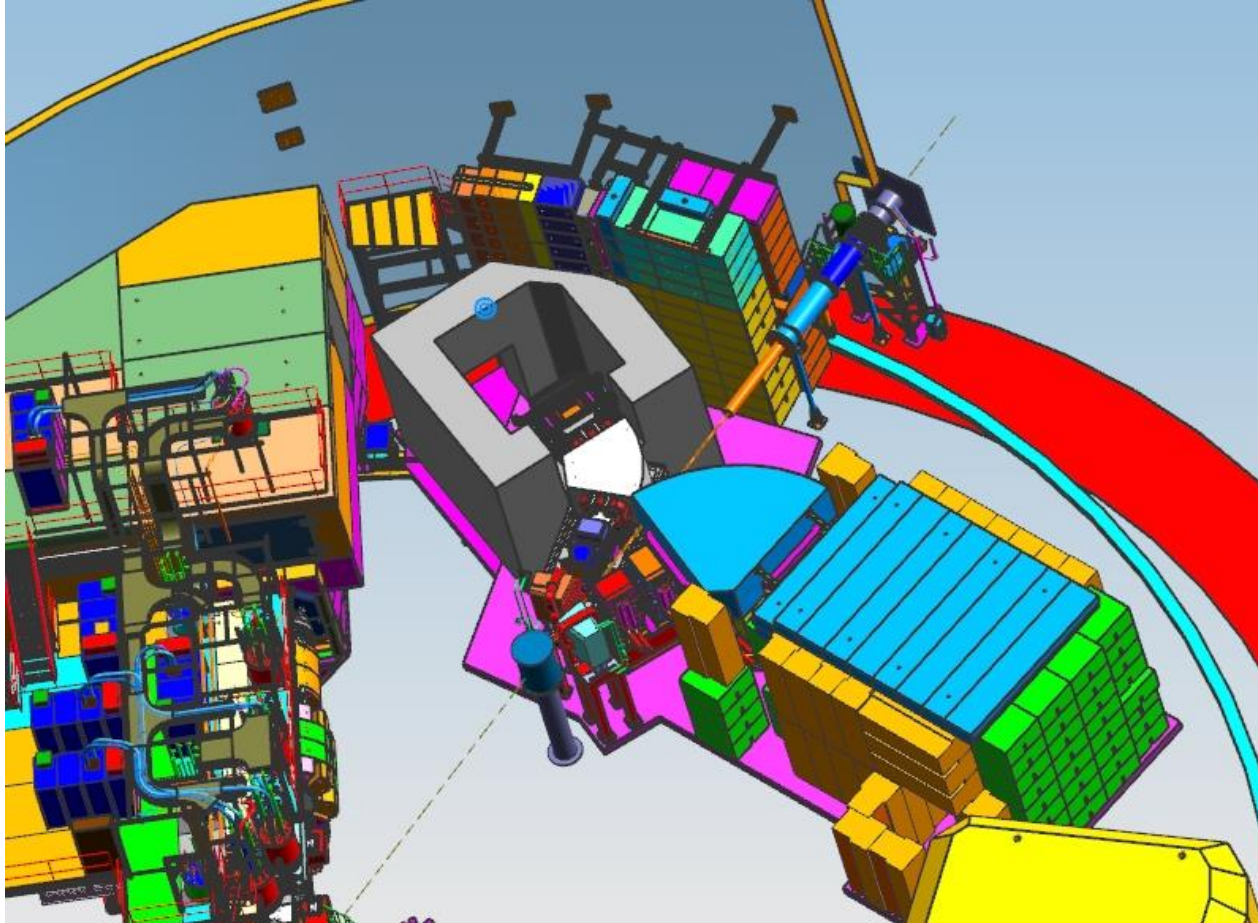
Hall A

- Install MOLLER Jan 2025 – Jan 2026
- Run MOLLER Jan 2026 - 2029

HKS/HES layouts



HKS/HES layouts



HKS/HES layouts

