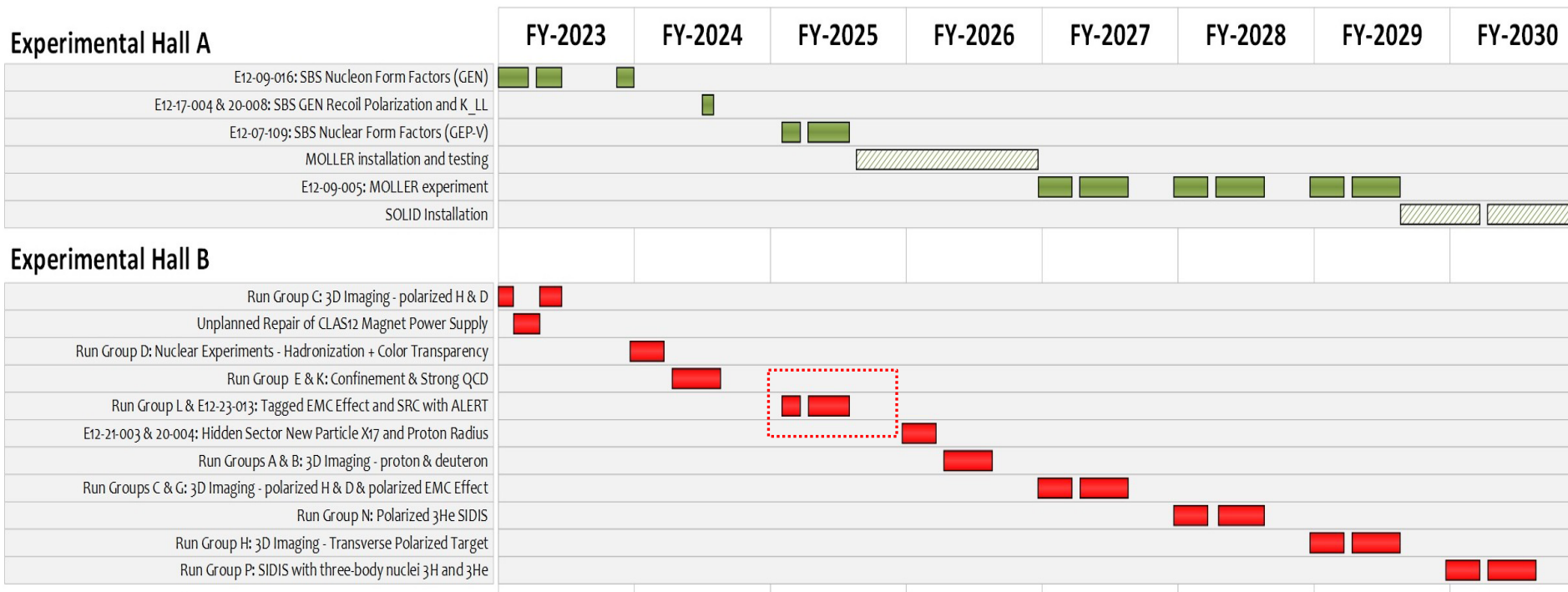


Stato della presa dati di CLAS12/Hall B

Presenza dati anno corrente conclusa il 20/5/2024 (SAD 2024) causa restrizioni di budget

- 104 PAC days di run completati
- installato nuovo bersaglio criogenico LH_2/LD_2 utilizzato nelle prese dati 2023 e 2024
- completato RG-D “Hadrons and cold nuclear matter” program (40 PAC days, 11 GeV), LD_2 + 3 bersagli nucleari
- avanzamento del programma di presa dati per:
 - **RG-K:** 37 PAC days con bersaglio LH_2 a 6.4 e 8.4 GeV
 - Raggiunta la migliore risoluzione in impulso con CLAS12
 - Rimangono 51 PAC days per il completamento del run group
 - **RG-E:** 27 PAC days (su 33) con bersaglio LD_2 + 5 bersagli nucleari



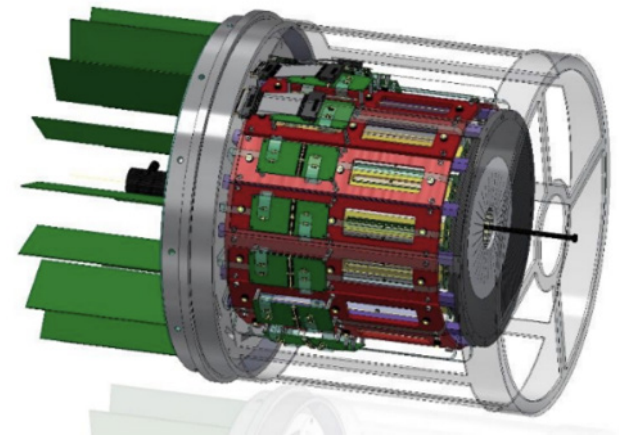
2025: previste 24 PAC weeks di presa dati

SAD or scheduled Run Group	Setup / Status	Target	Beam Energy	Start Date	End Date	Scheduled Calendar Days	Remaining PAC Days Before Run	Scheduled PAC Days = Cal. Days/2	Actual PAC Days from ABUs	Remaining PAC Days After Run
RG-L	ALERT	high pressure gas	11	2025-02-10	2025-05-31	110	55	55		0
RG-T	ALERT	high pressure gas	6.6	2025-05-31	2025-07-04	34	17	17		0
SAD 2025				2025-07-04			sum:	72		

Programmazione prese dati 2025

L'attività di CEBAF è prevista riprendere il 2/2/2025

- Esperimento ALERT con bersaglio ad alta pressione di H, D, ^4He
 - ALERT: **A Low Energy Recoil Tracker**
 - Nuovo tracker che sostituisce il rivelatore vertice di Silicio CVT:
 - camera a deriva iperbolica
 - Time of flight array
 - RG-L: 11 GeV; RG-T: 6.6 GeV
 - Misure previste:
 - Nuclear GPDs, tagged EMC, tagged DVCS
- Con 24 PAC-weeks non c'è più spazio per prese dati di altri gruppi (\Rightarrow no HPS)



Publicazioni CLAS12 2023/24

1. I.A. Skorodumina et al. [CLAS], “*Double-pion electroproduction off protons in deuterium: Quasifree cross sections and final-state interactions*”, Phys. Rev. **C109** (2024) no.6, 065205
2. A. Kim et al. [CLAS], “*Beam spin asymmetry measurements of deeply virtual π^0 production with CLAS12*”, Phys. Lett. **B 849** (2024), 138459
3. C. W. Kim et al. [CLAS], “*Measurement of the helicity asymmetry E for the $\vec{\gamma} \vec{p} \rightarrow p \pi^0$ reaction in the resonance region*”, Eur. Phys. J. **A 59** (2023) no.9, 217
4. S. Diehl et al. [CLAS], “*First Measurement of Hard Exclusive $\pi^{\pm} \Delta^{++}$ Electroproduction Beam-Spin Asymmetries off the Proton*”, Phys. Rev. Lett. **131** (2023) no.2, 021901
5. G. Christiaens et al. [CLAS], “*First CLAS12 Measurement of Deeply Virtual Compton Scattering Beam-Spin Asymmetries in the Extended Valence Region*”, Phys. Rev. Lett. **130** (2023) no.21, 211902
6. S. Diehl et al. [CLAS], “*A multidimensional study of the structure function ratio $\sigma_{LT'}/\sigma_0$ from hard exclusive π^{\pm} electro-production off protons in the GPD regime*”, Phys. Lett. **B 839** (2023), 137761
7. T. Chetry et al. [CLAS], “*First Measurement of Λ Electroproduction off Nuclei in the Current and Target Fragmentation Regions*”, Phys. Rev. Lett. **130** (2023) no.14, 142301
8. I. Korover et al. [CLAS], “*Observation of large missing-momentum ($e, e'p$) cross-section scaling and the onset of correlated-pair dominance in nuclei*”, Phys. Rev. **C 107** (2023) no.6, L061301
9. H. Avakian et al. [CLAS], “*Observation of Correlations between Spin and Transverse Momenta in Back-to-Back Dihadron Production at CLAS12*”, Phys. Rev. Lett. **130** (2023) no.2, 022501
10. S. J. Paul et al. “*Alignment of the CLAS12 central hybrid tracker with a Kalman Filter*”, Nucl. Instrum. Meth. **A 1049** (2023), 168032
11. Y. Tian et al. [CLAS], “*Exclusive π electroproduction off the neutron in deuterium in the resonance region*”, Phys. Rev. **C 107** (2023) no.1, 015201