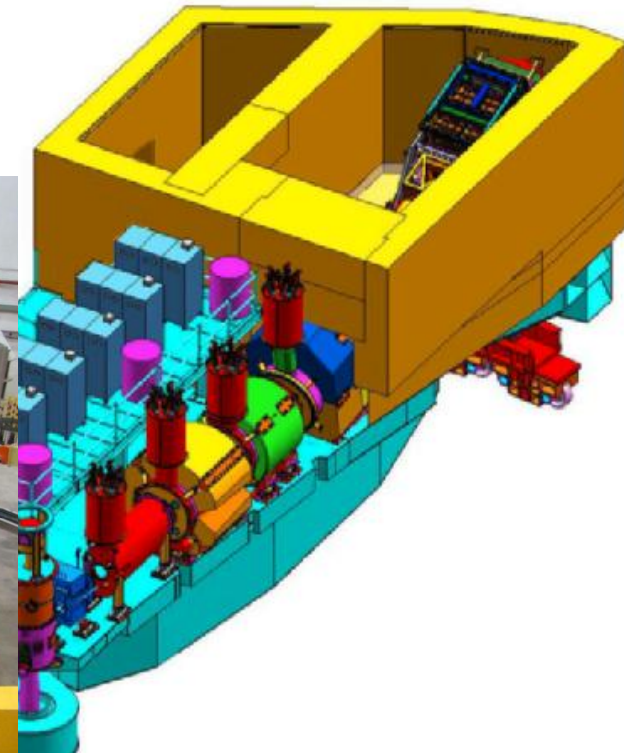
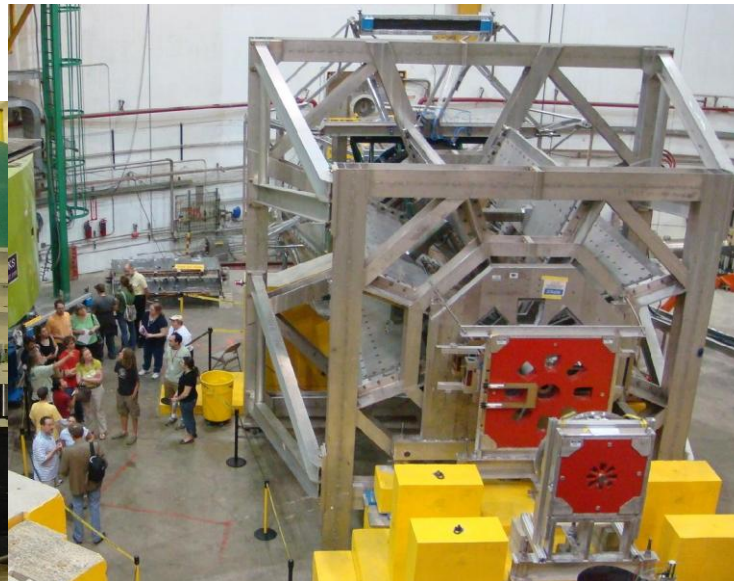
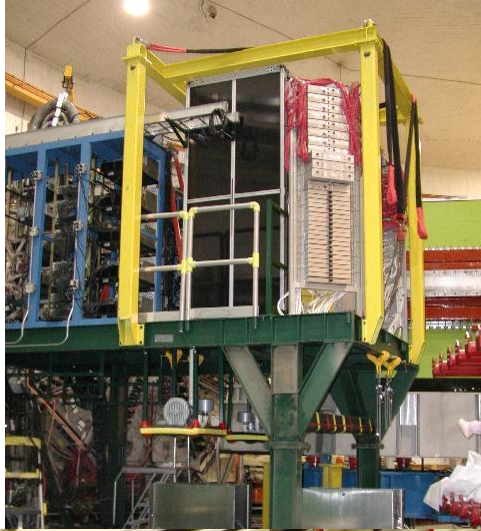


12 GeV  
Commissioning  
Discussion

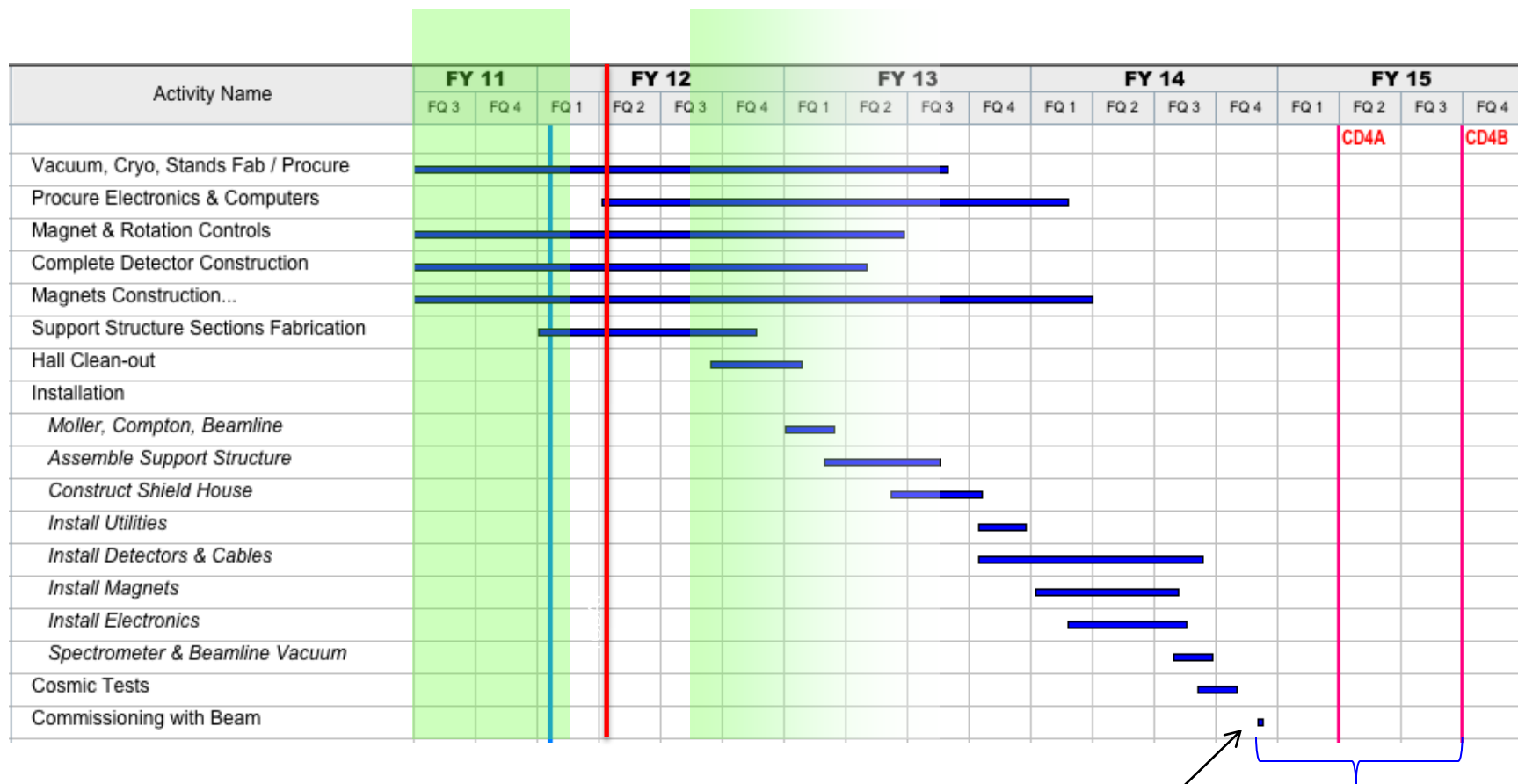
January 13-14, 2012



# Approved and Conditional 12 GeV Hall C Experiments

Number	Experiment	Grade	Approved Day	Conditionally	Non-standard Equipment
E12-06-101	Pion Form Factor	A	52		
E12-06-104	SIDIS R	A-	40		
E12-06-105	$x > 1$	A-	32		
E12-06-121	He3 $g_2$	A-	29		Polarized He3 target
E12-07-105	(e,e' $\pi$ ) Exclusive Factorization	A-	36		
E12-09-011	(e,e'K) Exclusive Factorization	B+	40		
E12-09-017	SIDIS $P_t$	A-	32		
E12-09-002	Charge Symmetry Violation	A-	22		
E12-10-002	F2 @ large x	B+	13		
E12-10-003	d(e,e'p)	B+	21		
E12-10-008	EMC	A-	23		
E12-06-107	Color Transparency	B+	26		
E12-06-110	He3 A1n	A	36		Polarized He3 target
E12-11-002	He4(e,e'pol(p))	B+	37		FPP in HMS
E12-11-009	Neutron Form Factor	B+	50		Magnet + Neutron polarimeter
C12-11-102	Exl and semi-exl $\pi^0$ prod	C2		69	$\pi^0$ detector
E12-11-107	EMC d(e,e' backward p)	B+	40		LAD (Hall B TOF bars)
			529	69	
Total	598 Days		6.8 Years	@	25 Weeks/year
					Schedule 2 days / PAC day

# Hall-C Schedule (prepared October, 2011)



Initial Commissioning with Beam - September 2014

10 months float

# Beam Availability Guidance

- FY15
  - 10.5 PAC days for pre-ops/detector checkout. >2 GeV/pass
  - \*
  - 25 PAC days for research 2.2 GeV/pass
- FY16
  - 92 PAC days for research
- FY17
  - 92 PAC days for research
- ...

\* Very optimistically some additional opportunistic days?



# My thoughts on expt ordering

1. Do first a mix of short/partial experiments with moderate requirements and that provide calibration/performance data for later experiments and have several thesis topics.
2. Do A/A- experiments as early as possible
3. Do experiments that exercise full PID capabilities, polarized beam, high SHMS momentum and unique Hall C capabilities (i.e. L/T separation) early.
4. Some some SIDIS early to support overall lab SIDIS program.
5. Maximize involvement of contributors to upgrade.
6. Start a large installation experiment in first two years.

# Possible first 5 exp ordering

1. ~25 PAC days (first physics run)  
9 days E12-06-107 (CT B+) Do (e,e'p) only  
13 days E12-10-002 (F2 B+)  
E12-10-108 (EMC A) do  $Q^2$  scan on  $\text{LH}_2$ ,  $\text{LD}_2$ ,  $^{12}\text{C}$  integrated with F2
  2. 32 days E12-09-017 (SIDIS Pt A-)  
Some K detection done here
  3. 22 days E12-09-002 (SIDIS CSV A-)
  4. 40 days E12-09-011 (K factorization B+)  
Rosenbluth
  5. 29 days E12-06-121 (Pol He3 g2 A-)  
If Hall A He3 running done.
- 148 Days total. < 2 years at asymptotic 92 PAC days/year

# Comments Received

1.  $d(e,e'p)n$  (E12-12-003 B+ 21 days), a logical commissioning experiment not included.
2. GeN (E12-11-009 B+ 50 days) not in first two years
3. A1 (E12-06-110 A 36 days) not in first two years  
( would run after g2)
4. SAW: Heavy on SIDIS. Would like second “experiment” to be (workable) combination of parts of two experiments.

# My Goals

- Obtain some consensus on first ~25 days
- Gather requirements for first 25 days
- Gather requests for pre-run studies/data desired by later early experiments
  - 2.2GeV per pass may not be guaranteed for pre-ops beam
- Solicit comments/objections to presented first 5 experiment list
- Encourage a combined partial expt. plan for second experiment.