

Run 12: STAR Status and Schedule Update

RHIC Coordination Meeting

October 18, 2011

Bill Christie BNL

Outline

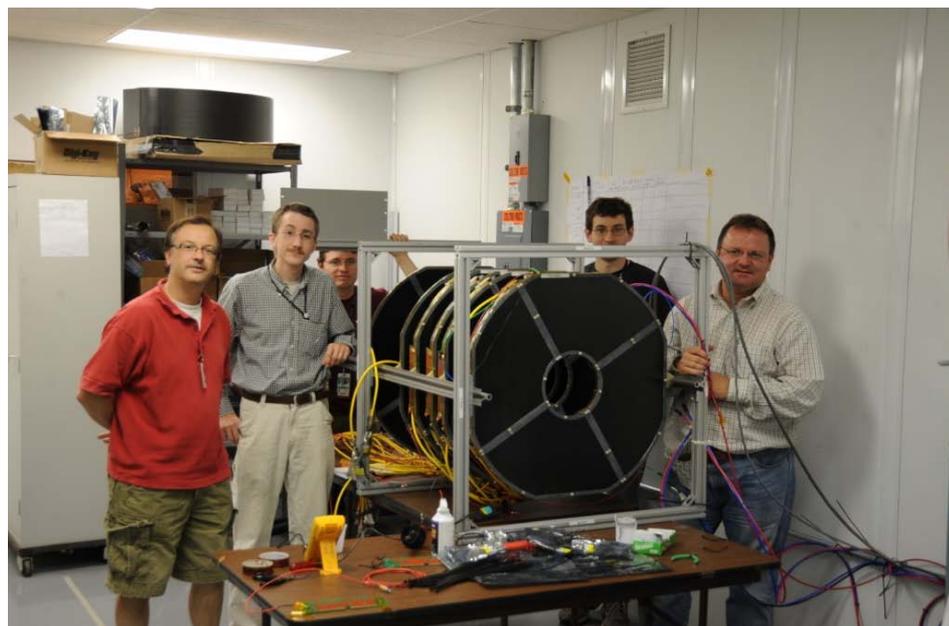
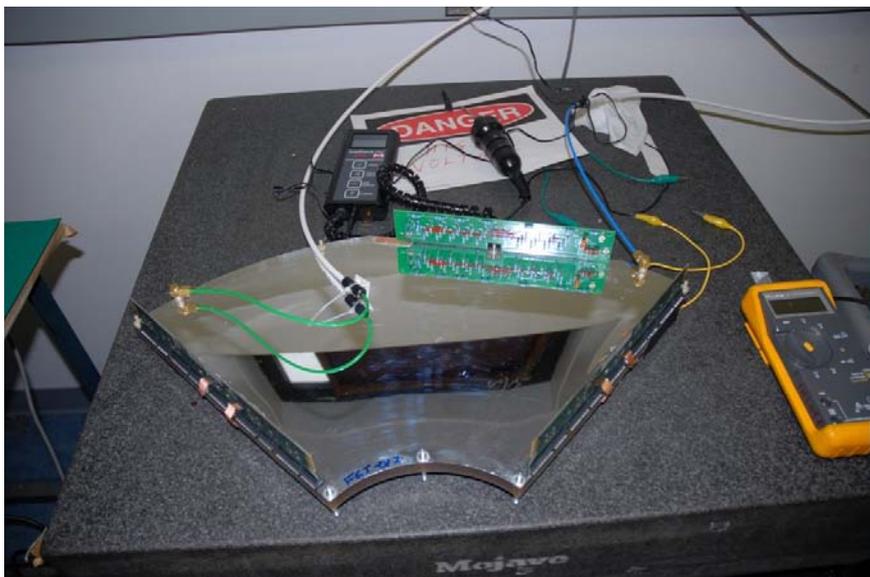
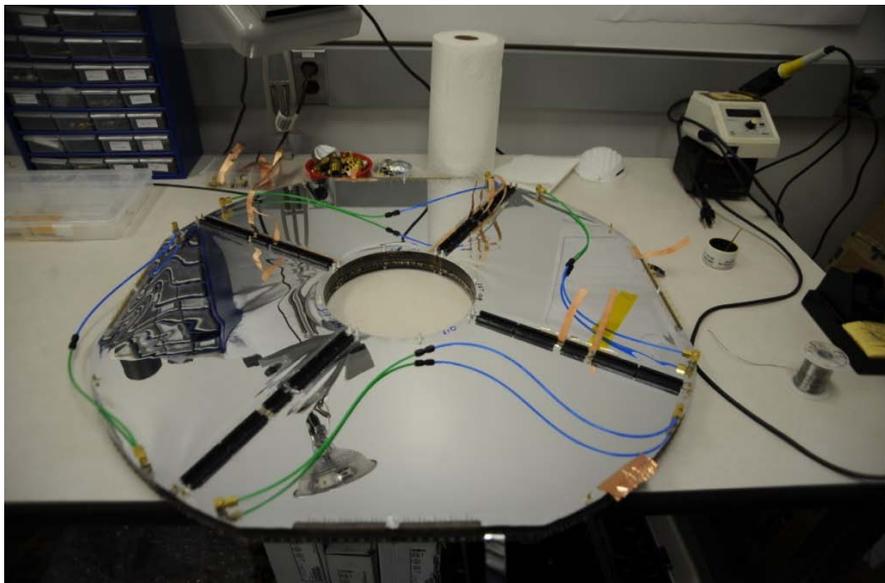
- Status update
- Schedule update and issues
- Summary



Status Update

- Decision was made in late July to Roll the STAR detector out of the Interaction Region (IR) for a partial installation of the Forward GEM Tracker (FGT).
- A schedule for the Roll out, Roll in, and installation effort was generated with input from all sub systems.
- With the installation of the FGT, and its support structure (new carbon fiber cones inside TPC Inner Field Cage) the Forward Time Projection Chambers (FTPCs) and the Photon Multiplicity Detector (PMD) were retired and have been removed.
- STAR Roll out went according to schedule.
- In addition to partial FGT installation for Run 12, we'll be doing a partial installation of the Muon Telescope Detector (MTD). MTD modules expected to arrive at BNL this weekend. Also expect to install new GEM Monitor Trackers (GMT), but these will come late in the Shutdown.
- FGT construction held fairly well to the agreed upon schedule, but there has been about a three week delay in the delivery of prototype carbon fiber parts from LBNL that are necessary for the final assembly and installation of the FGT.
- Routine maintenance on other STAR sub systems (i.e. TPC, Trigger, BEMC, EEMC, DAQ, TOF, FMS) proceeding. No issues expected.
- FGT installation delay such that RHIC cool down schedule for January 2nd can't be met by STAR.

A few FGT images



Calendar for October 2011 (United States)

October						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
		TODAY	Move old cone & BP to Clean room roof		Last FGT spacer arrives	MTD & TOF trays arrive
23	24	25	26	27	28	29
	← Assembly of New Cone, old Beam Pipe, & FGT →					
			Remove/move Beam pipe			
30	31					
	← Shrouds at BNL Assembly of New Cone, old Beam Pipe, & FGT →					

Key Milestones for October:

- Last of the FGT cooling tube spacers arrive at BNL on or before Oct. 21st.

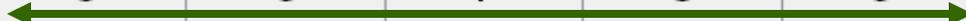
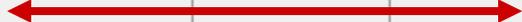
Calendar for November 2011 (United States)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
	← Assembly of New Cone, old Beam Pipe, & FGT →	← Shrouds at BNL →	← New Cone assembly on rails →	← Install Cone into STAR, remove rails, HV test →	← Contingency →	
6	← Remove rails & stanchions →	← Disassemble East Platform & Rig away →	← Remove Power →	← Roll In & position →	11	12
13	← Install seismic anchors →	← Install bridge & Stairs →	← Collaboration mtg at LBNL →	← Install Shield Wall →	18	19
	← Install E. Scaffolding →	← Magnet H2O pipes →	← MCW H2O pipes →	← Connect vacuum pipe, starting with East Side →		
20	← Connect vacuum pipe, setup bake out →	← Connect various utilities, cables, gas lines, etc →	← Between Platforms and walls & Floor racks (Who connects EEMC Trigger cables?) →	24	25	26
	← Thanksgiving Day →	← BNL Holiday →				
27	← Finish Beam pipe Bakeout & remove equipment →	← Connect various utilities, cables, gas lines, etc →	← Between Platforms and walls & Floor racks →			
Holidays and Observances: 11: Veterans Day, 24: Thanksgiving Day						

Key Milestones for November:

- The last piece/item needed (shroud) to complete the assembly of the new cone structure with the FGT and new beam pipe will arrive at BNL on or before Nov. 1st.
- Cone assembly, with beampipe & supports, and FGT, complete on or before November 2nd.
- STAR rolled into IR before Veteran's Day.
- Lab Holidays on Nov. 11th, 24th, and 25th.
- Collaboration mtg at LBNL Nov. 14th – 18th.
- Connect TOF gas lines no later than week of Nov. 21st.

Calendar for December 2011 (United States)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
			  <p>Sub System Check out period starts</p> <p>Remaining installation tasks</p>			
4	5	6	7	8	9	10
	  <p>Sub System Check out period continues</p> <p>Remaining installation tasks</p>					
11	12	13	14	15	16	17
	   <p>Sub System Check out period continues</p> <p>Remaining installation tasks</p> <p>Install West Poletip?</p> <p>STAR Upgrade Workshop & C. Whitten Memorial UCLA</p>					
18	19	20	21	22	23	24
	 <p>Sub System Check out period continues</p>				<p>Half day BNL Holiday</p>	
25	26	27	28	29	30	31
		 <p>Certify Interlocks</p>				
<p>Holidays and Observances: 25: Christmas Day, 26: 'Christmas Day' observed</p>						

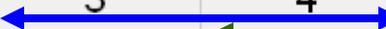
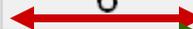
Possible Remaining Installation tasks:

- MTD trays
- MTD utilities
- TOF/GMT trays
- GMT Cables
- GMT Gas system
- Install VPDs
- VPD cabling
- FGT Gas system
- Modify Air distribution system
- etc.

N.B.:

West Poletip installation date will depend on amount of EEMC work still to do come December. Also shows up on January 3-4.

Calendar for January 2012 (United States)

January						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
		 Install E&W Poletips, hook-up leads and start Mag. H2O	 Start Magnet H2O system	 MAG. P.S. testing		
		 Sub System Check out period continues				
8	9	10	11	12	13	14
	 MAG. P.S. testing & Heat Run	 TPC HV chk with Mag. on	 Install BBCs	 Contingency & Sub System Check out period continues		
		 MAG. P.S. testing & Heat Run				
15	16	17	18	19	20	21
		RHIC Cool Down Starts ?				
22	23	24	25	26	27	28
29	30	31				

Holidays and Observances: 1: New Year's Day, 2: 'New Year's Day' observed, 16: Martin Luther King Day

Calendar generated on www.timeanddate.com/calendar

Summary

- Assuming no further delays with the FGT installation, the Roll in date for STAR will have a three week delay from our original schedule.
- An aggressive schedule has been put together which includes this delay. To hold this schedule STAR will need a high priority for C-AD resources when needed (i.e. Techs, Riggers, Carpenters, Vacuum grp., etc.).
- At this point, this new schedule indicates that STAR will need to request an ~ two week delay in the RHIC Cool down, from January 2nd to January 17th.

