

PHENIX WEEKLY PLANNING



5/16/2013
Don Lynch

This Week

- Run 13 Continues: run support
- No Scheduled Maintenance this week:
- next maintenance day: 5/22?
- Ethane Tube Trailer Upgrade Continues:
Procedure Approval
- mRPC Test Lab (Formerly RPC Factory): Walkthru, procedure approval
- VTX strip pixel stave re-design prototype evaluation
- Continue sPHENIX support
 - HCal prototype PO
 - EMCal prototype design continuing
- MPC-Ex design for run 14
- Future IR evolution modeling - STAR and PHENIX eRHIC upgrades to be

Next Week

- Run 13 Continues: run support, general maintenance
- Next Scheduled Maintenance Day: Wednesday, May 22?
- mRPC Test Lab (Formerly RPC Factory) Startup
- Ethane Trailer pre-liminary walkthru: (final walkthru when 1st trailer arrives before run 14)
- Continue VTX strip pixel stave prototype evaluation and production order placed
- Continue sPHENIX support
- Continue MPC-Ex design
- Future IR evolution modeling

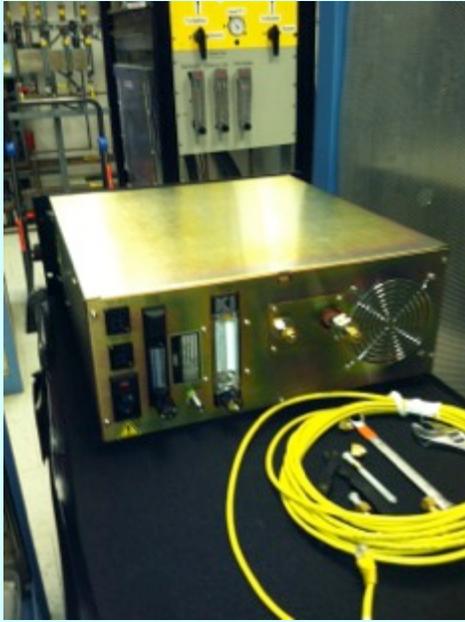


Ethane Trailer Project:
In progress



New Gas Analyzer Project (RPC recirculation and more)

PHENIX PRODUCTION



5/16/2013

mRPC Test Lab Project

PHENIX PRODUCTION



5/16/2013



VTX strip-pixel re-design:

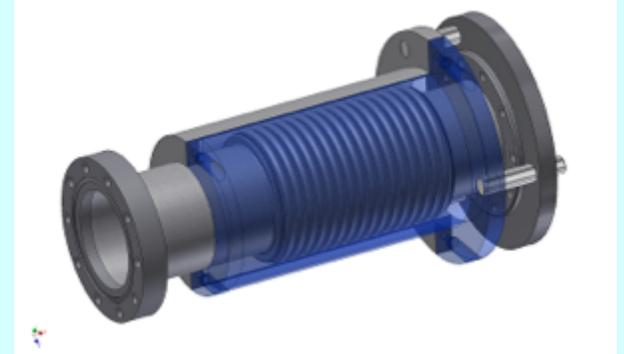
1st preproduction test article assembled, evaluated, production parts ordered, 3 more preproduction test articles in progress, performance tests next week



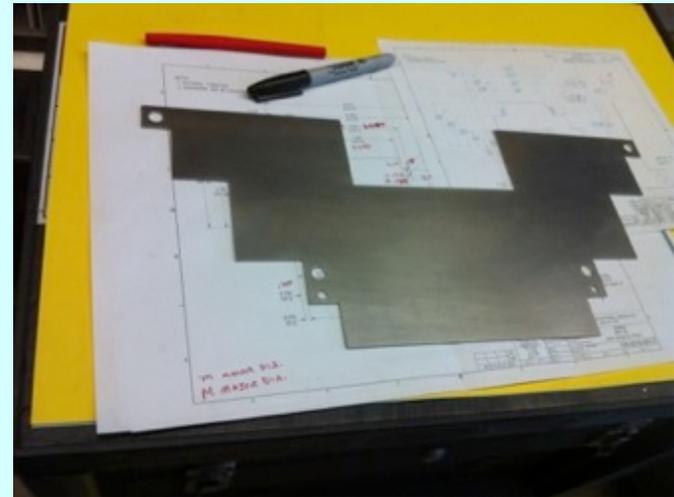
ID	Task Name	Duration	May							June							July							August							September							October							November							December							January						
			21	28	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	19																							
1	VTX/FVTX 2013 Re-Building Schedule	107 days	[Gantt bar from May 21 to August 25]																																																														
2	Remove VTX east strppxls	0 days	◆ 4/25																																																														
3	Evaluate leaks	0 days	◆ 4/25																																																														
4	Design Improved Strppxl stave to improve reliability "ha	0 days	◆ 4/25																																																														
5	remove, clean and test SMS from east strpxls	0 days	◆ 4/25																																																														
6	order strpxl prototypes	0 days	◆ 4/25																																																														
7	receive prototype parts and fixtures from LBNL and LAN	7 days	[Bar from May 21 to May 28]																																																														
8	inspect prototype parts (Rachid flatness measurements	7 days	[Bar from May 21 to May 28]																																																														
9	Build proto stppxl staves	5 days	[Bar from May 28 to June 2]																																																														
10	order production strpxl stave core	1 wk	[Bar from May 28 to June 4]																																																														
11	order production strpxl stave facesheets	1 wk	[Bar from May 28 to June 4]																																																														
12	assign workspace	15 days	[Bar from May 28 to June 12]																																																														
13	1st art perf. testing (press, th cycl, th perf)	5 days	[Bar from June 4 to June 9]																																																														
14	set up factory for mass production	3 wks	[Bar from June 4 to June 25]																																																														
15	receive production parts	10 days	[Bar from June 12 to June 22]																																																														
16	End of Run-13	0 days	◆ 6/16																																																														
17	remove VTX/FVTX east from IR to CHEM Lab	2 wks	[Bar from June 22 to July 2]																																																														
18	disassemble VTX/FVTX east at Chem lab	1 wk	[Bar from June 29 to July 6]																																																														
19	extract FVTX east and transport to PHYSICS	1 day	[Bar on July 6]																																																														
20	FVTX east eval, trblshtg & repairs as reqd	4 wks	[Bar from July 6 to July 27]																																																														
21	Stripixel East	50 days	[Gantt bar from June 22 to August 11]																																																														
22	Assemble East Strpxl stave	40 days	[Gantt bar from June 29 to August 8]																																																														
23	assemble strpxl stave 1-2	1 wk	[Bar from June 29 to July 6]																																																														
24	assemble strpxl stave 3-4	1 wk	[Bar from July 6 to July 13]																																																														
25	assemble strpxl stave 5-6	1 wk	[Bar from July 13 to July 20]																																																														
26	assemble strpxl stave 7-8	1 wk	[Bar from July 20 to July 27]																																																														
27	assemble strpxl stave 9-11	1 wk	[Bar from July 27 to August 3]																																																														
28	assemble strpxl stave 12-14	1 wk	[Bar from August 3 to August 10]																																																														
29	assemble strpxl stave 15-17	1 wk	[Bar from August 10 to August 17]																																																														
30	assemble strpxl stave 18-20	1 wk	[Bar from August 17 to August 24]																																																														
31	Attach Sensors to East strpxl stave	40 days	[Gantt bar from July 27 to September 6]																																																														
32	sensors on strpxl stave 1-2	1 wk	[Bar from July 27 to August 3]																																																														
33	sensors on strpxl stave 3-4	1 wk	[Bar from August 3 to August 10]																																																														



Existing vacuum bellows anti-squirmer
In MPC S Cavity



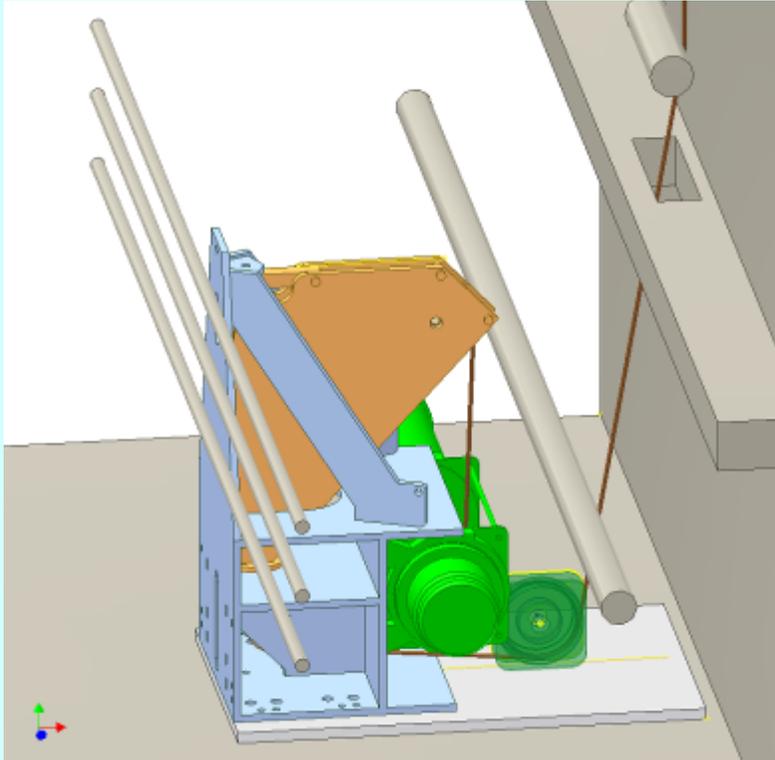
Proposed vacuum bellows anti-squirmer
in MPC S Cavity to
accommodate MPC-Ex



1st Tungsten Plate received: Inspection OK

Window Washer Winch Upgrade

LUSITZUCK SCARLETT NORW



Purchase Order Pinned

Need to straighten out spec requirements

5/16/2013

Attention: Donald Lynch
Company: Brookhaven National Lab
Phone: 631-344-2253

Based on the information provided to us for an AC hoist to be used for lifting, we are pleased to propose the following:

Line	Qty.	Product:	Net Each	Extended
1	1	Columbia HF2100-2A17-L-03 AC Electric Hoist <ul style="list-style-type: none"> • 2.0 HP TEFC UL-listed brakemotor • 230/3/60 input power • Automatic, load-suspending braking system • Permanently lubricated, high-efficiency planetary gear reduction • Argent gray enamel paint finish • Includes single speed low voltage controls <ul style="list-style-type: none"> ◦ Reversing motor starter in a NEMA 4X fiberglass enclosure ◦ UL-listed ◦ Includes NEMA 4X hand-held pendant control with UP/DOWN momentary contacts and up to 15' lead Does not include wire rope	\$5,022.00	\$5,022.00

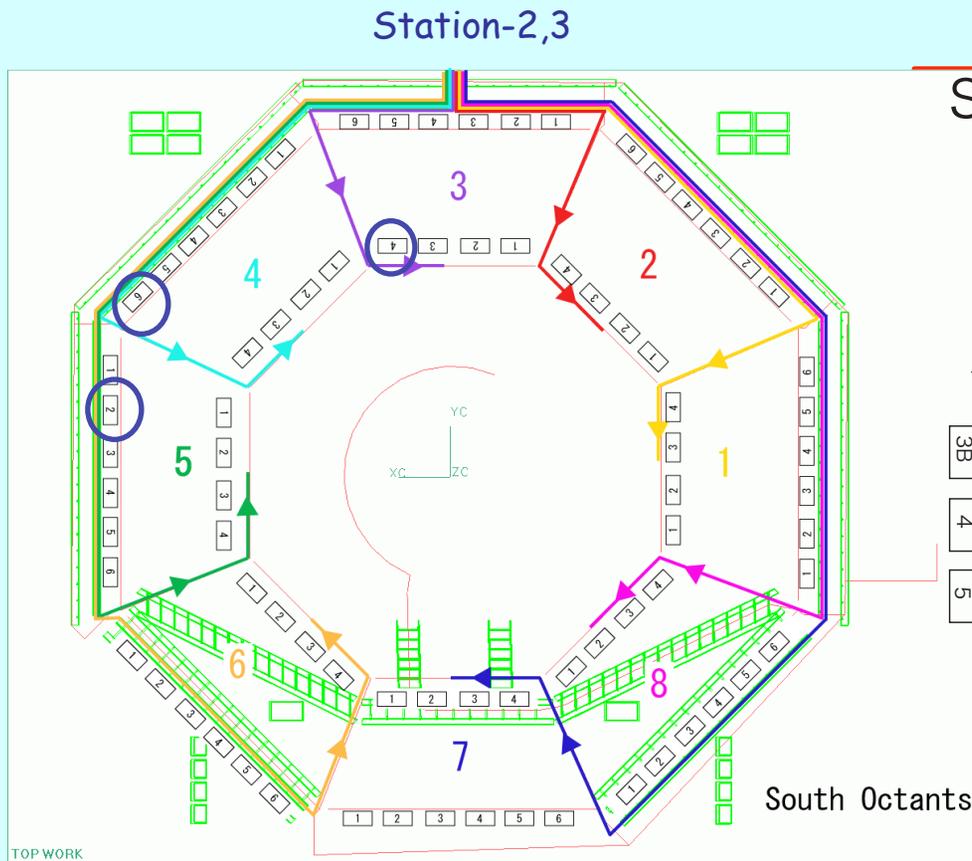
Options:

Line	Qty.	Product:	Net Each	Extended
2	1	AutoAdvance Line Spooler <ul style="list-style-type: none"> • Designed and built for Columbia HF2100-2A17-L-03 • Incoming line from front of spooler • Fabricated steel frame • Sheaves are steel construction, grooved for 3/8" line • Ensures proper line spooling regardless of fleet angle • Rope tension must be maintained for proper operation 	\$3,298.00	\$3,298.00

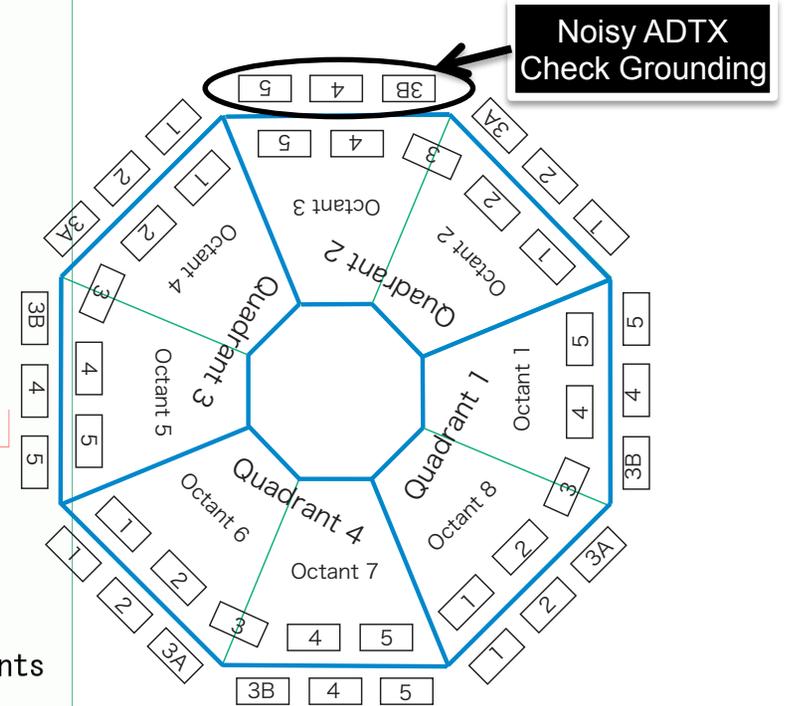
Line	Qty.	Product:	Net Each	Extended
3	1	VLS-6 Vertical Lead Sheave <ul style="list-style-type: none"> • 6,000 lbs load limit • Can be bolted down or welded for installation • Fabricated steel construction • Offset design allows for simple installation at any angle • Bronze bushed steel sheave grooved for 3/8" wire rope 	\$458.00	\$458.00

Line	Qty.	Product:	Net Each	Extended
4	1	Wire Rope <ul style="list-style-type: none"> • 200' of 3/8" stainless steel wire rope (7x19 construction) with latching hook • Supplied loose 	\$684.00	\$684.00

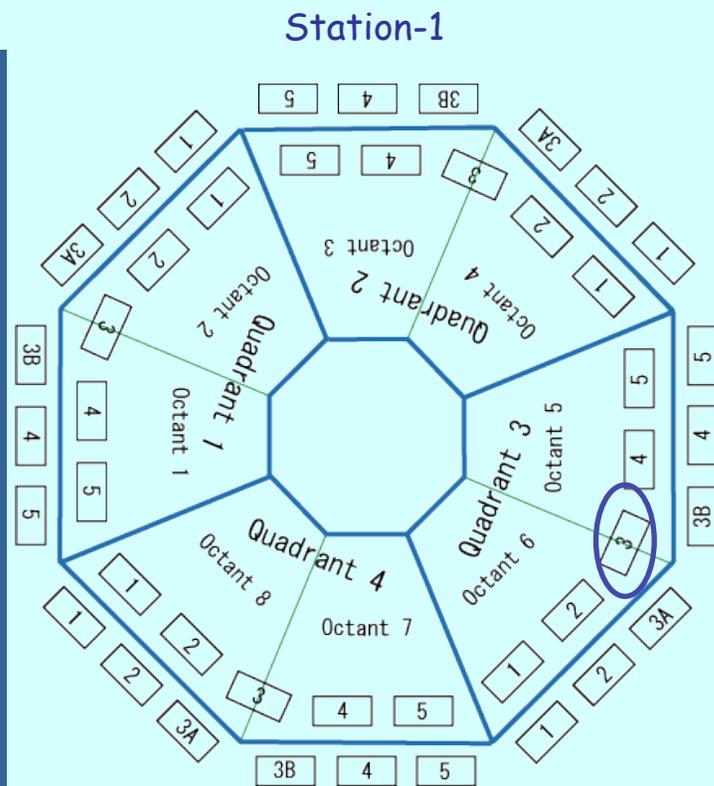
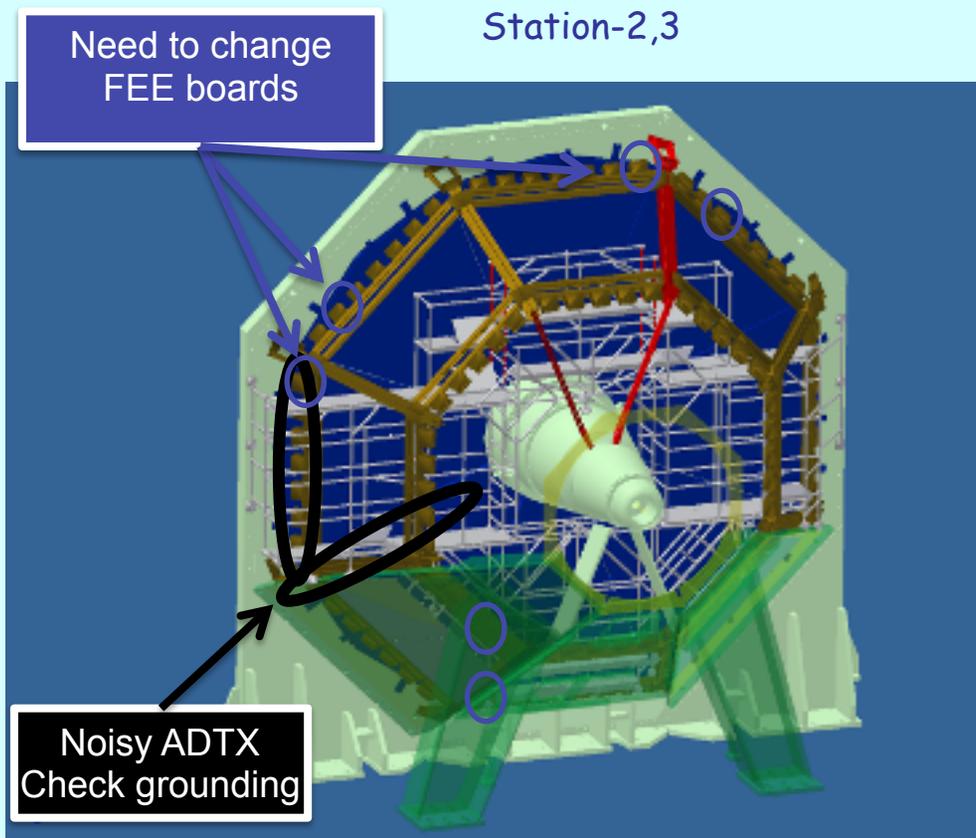
MuTr South Arm Areas to be accessed



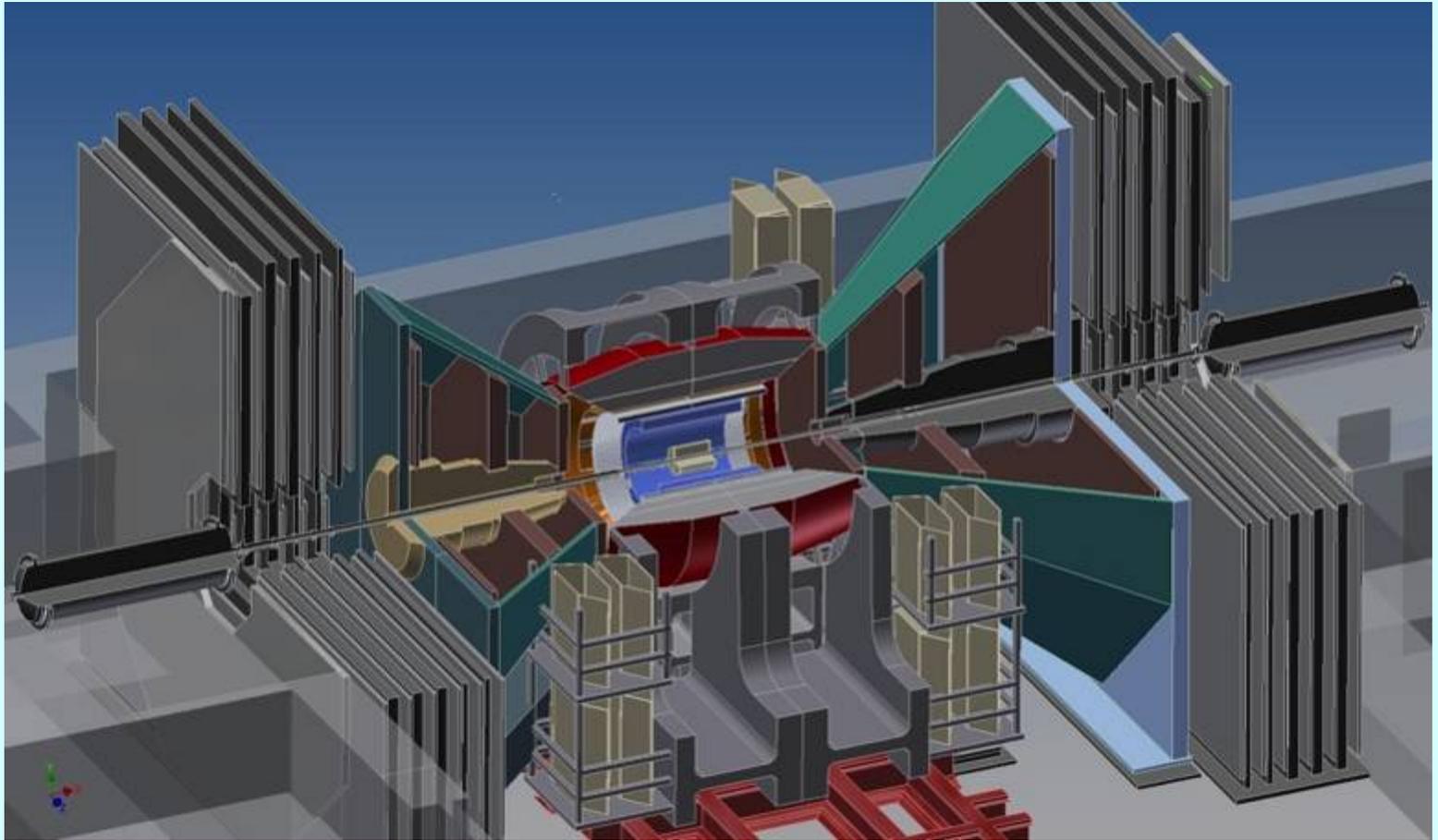
South Station-1 Chassis



MuTr North Arm Areas to be accessed



PHENIX 7 SDCOAT-NO-3M

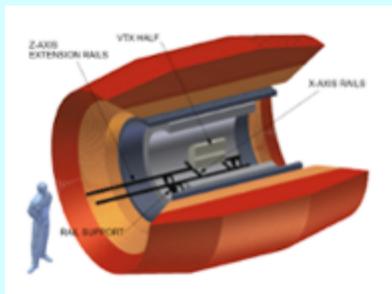


sPHENIX Proposed Upgrade

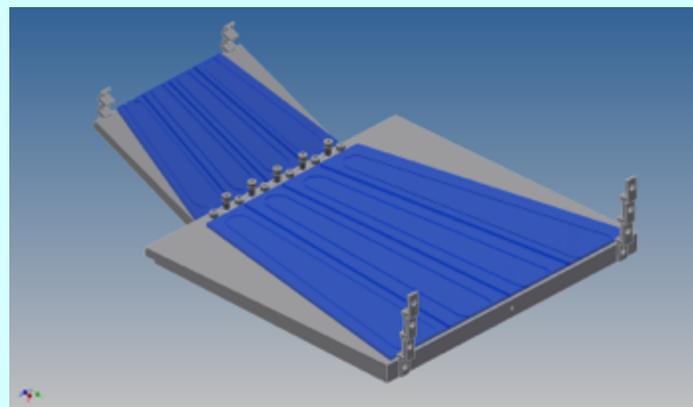
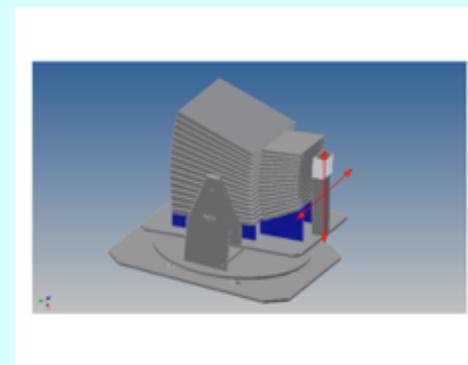
Work continues evaluating engineering tradeoffs for EMCal and HCal design, materials, etc.

Prototype HCal and EMCal in progress

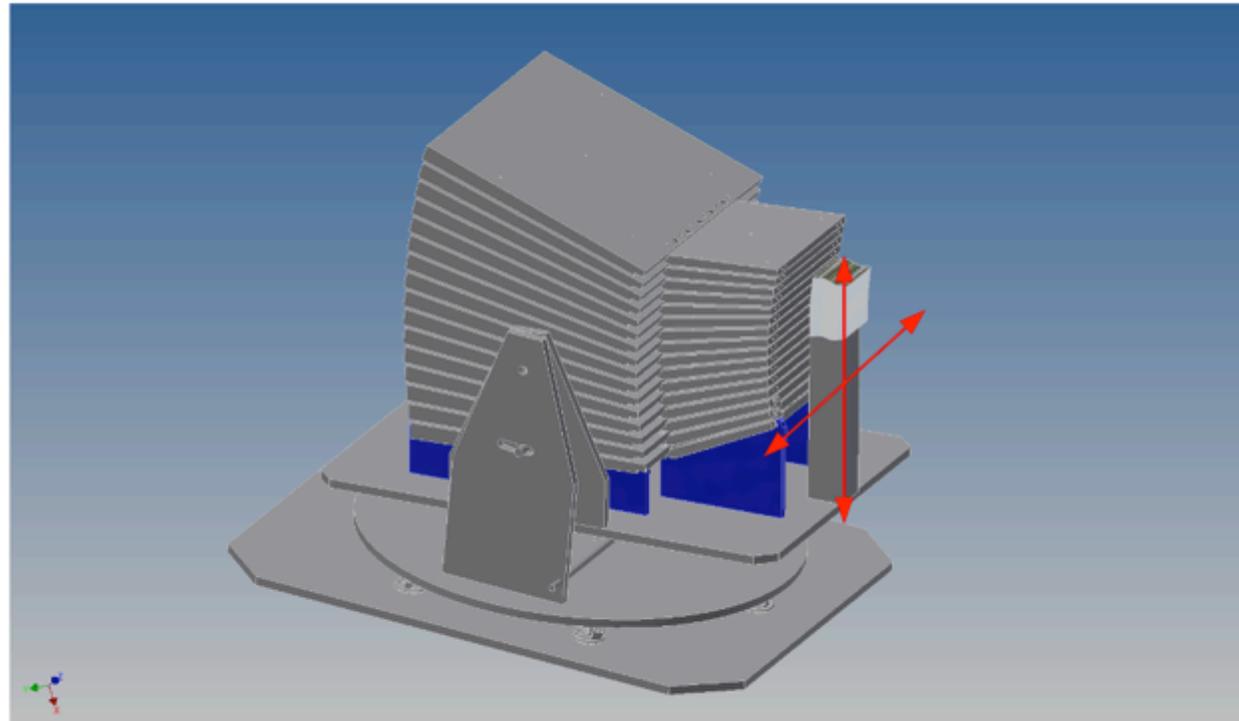
Bid packages for Hcal steel and scintillators in progress to be issued this week



Possible magnet change to available SC solenoid from SLAC. Will change all detector parameters



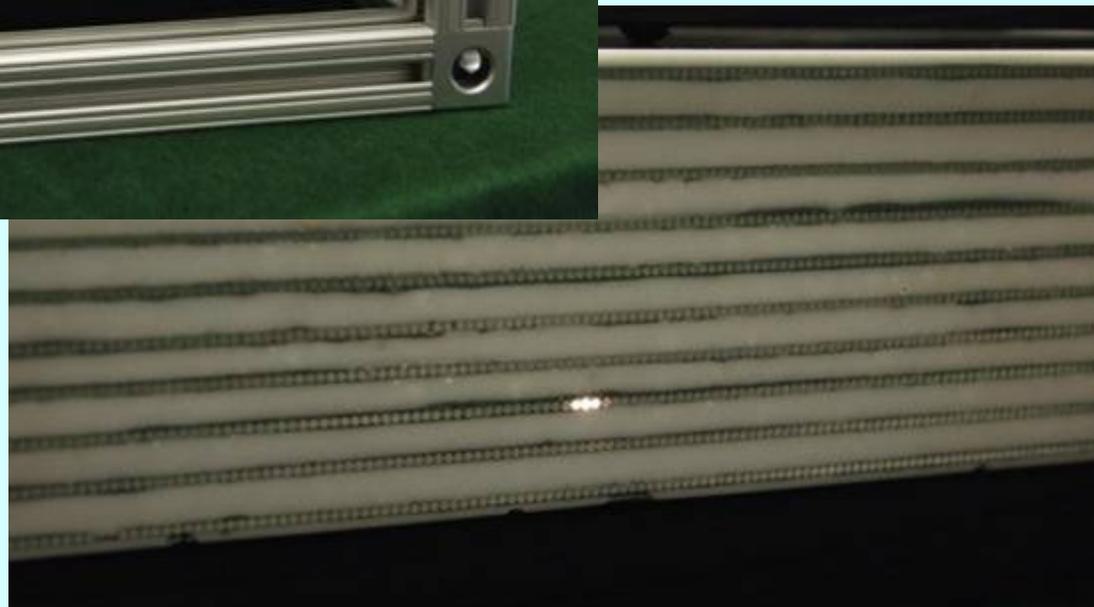
HCal Prototype Assembly Including 2 rotational DOF's

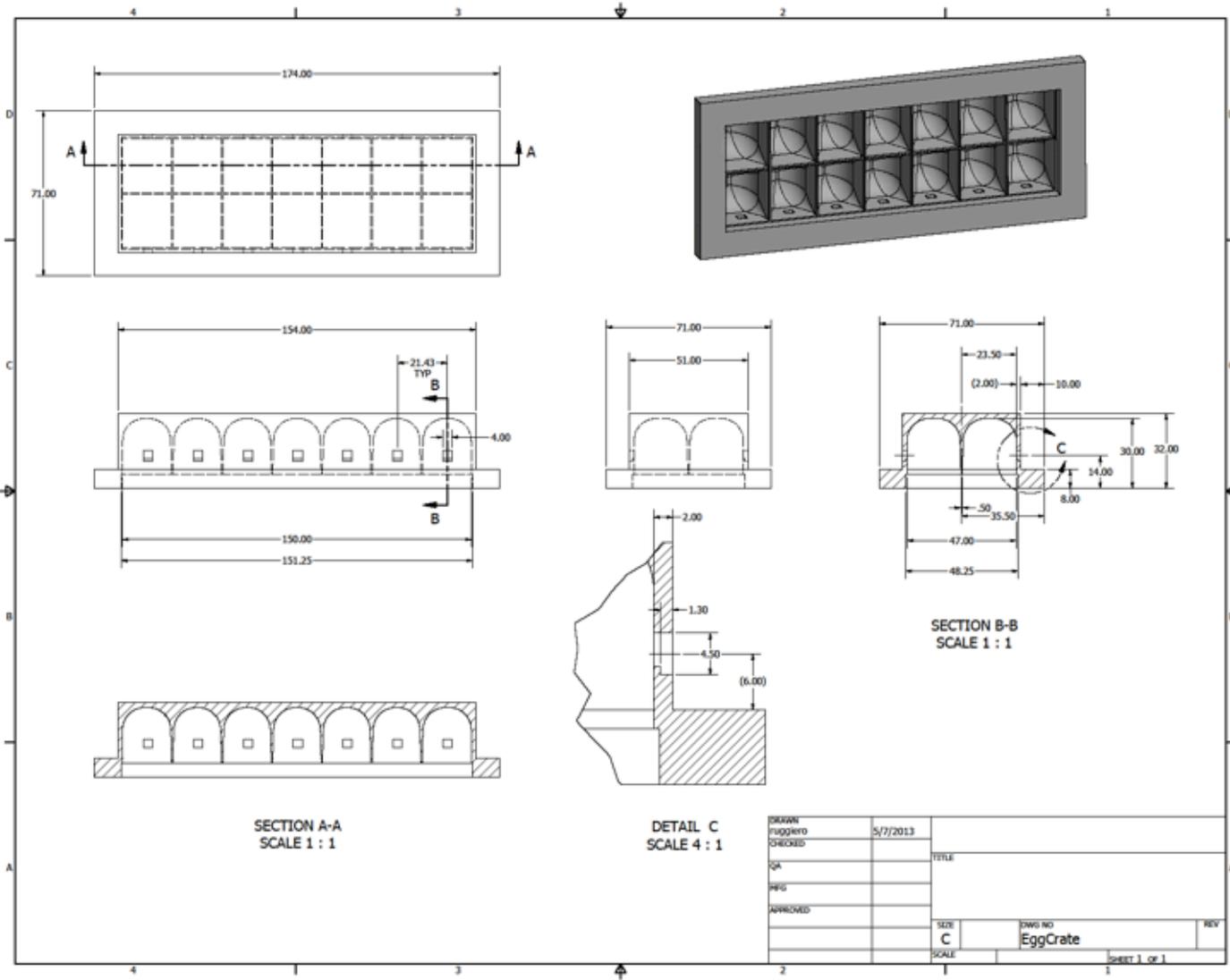


Expect to place order for HCal prototype parts thisweek

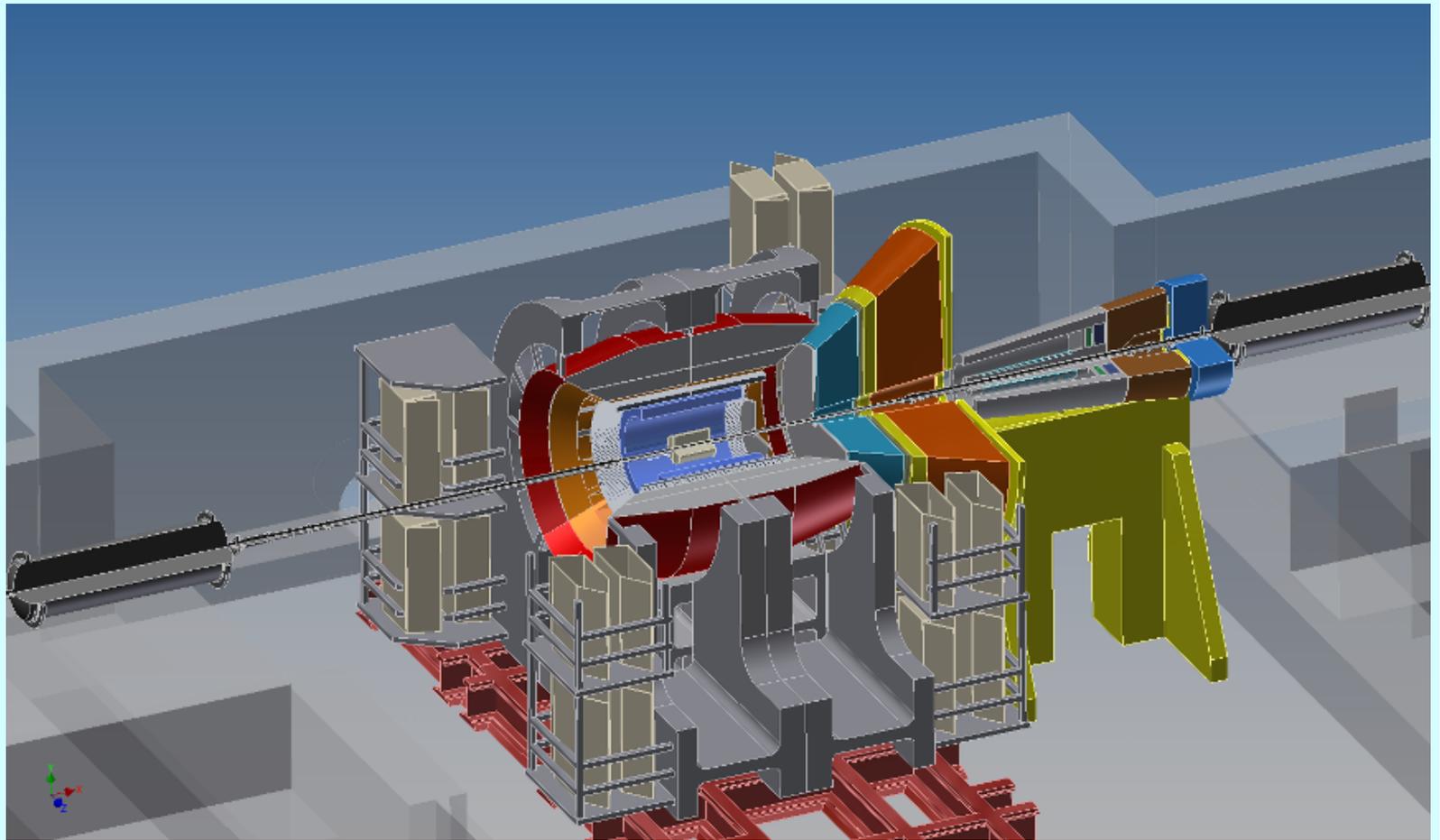


EMCal Prototype parts

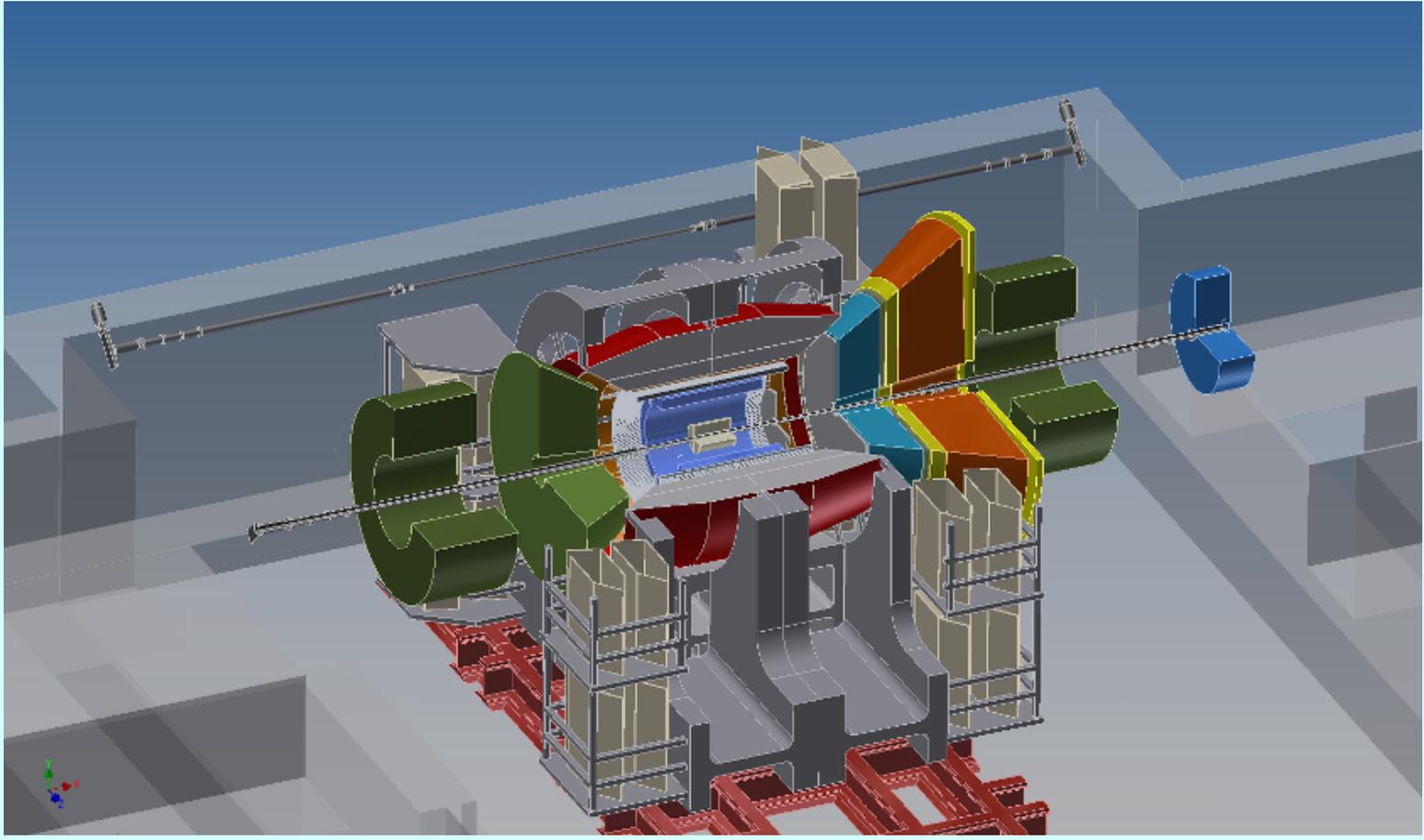




fsPHENIX



ePHENIX



Major Projects This Summer:

- VTX repairs/upgrades/general maintenance (Mike L.)
- DC East Window Replacement (Kenny J.)
- MPC-Ex Initial (partial) Installation (Jim L.)
- mRPC Tests in mRPC Test Lab (formerly RPC Factory) (Frank T.)
- sPHENIX Prototypes assembly & tests (All)
- MuTr troubleshooting and Repairs (Chris P.)
- Window Washer Winch upgrade (Jim L.)

Other Mechanical (TBD)

Other Electrical Projects

- HVAC Controls Upgrade (Frank T.)
- Complete Window Washer Controls Upgrade (Frank T.)

Other Electronics Projects

- Additional upgrading of ADAM system to MODBUS (Sal P.)
- Electronics research in support of sPHENIX and RATCAP (Sal P.)
- Lecroy HV communications upgrade (Sal P.)

Other Gas System Projects (TBD)

- RPC Gas Recirc. Upgrade (John T.)
- Drawing and Config. Control Improvements (SULI Student)

Other Infrastructure Projects (TBD)

2013 Shutdown Schedule

PHENIX
 NORTH
 SHUTDOWN

Prep for 2013 shutdown	2/11-6/11/2013
Design, Fabricate MPC-Ex	
Define tasks and goals	
Analysis and design of fixtures, tools and procedures	
Fabricate/procure tools and fixtures	
Tests, mockups, prototypes	
Receive, fabricate, modify, finish installables	
Review and approval of parts, tools, fixtures and procedures	
Assembly and QA tests	
VTX Strippixel redesign	In-progress
VTX Strippixel 1 st article stave assembly	5/3/2013
VTX Strippixel 1 st article qualification/performance tests	5/17/2013
VTX strippixel stave production	5/20-8/30/2013
VTX Strippixel sensor reclamation	4/1-8/30/2013
VTX Strippixel ladder assembly	6/1-9/27/2013
Pixel Ladder repairs	in progress
End of Run Party	6/28/2013
Run 12 Ends	6/11/2013
Shutdown Standard Tasks	6/11-7/19/2013
• Open wall, disassemble wall, Remove MuID Collars,	
• Move EC to AH, etc.	
Disassemble VTX/FVTX services	7/1-7/19/2013
July 4 th Holiday	7/4-5/2013
Remove VTX/FVTX and transport to Chemistry Lab	7/8/2013
Assemble, Test and Install MPC-Ex (North only?)	7/22-10/1/2013

PHENIX
 PRODUCTION

MuTR Troubleshooting, maintenance and repairs	7/22-9/27/2013
Summer Sunday (8/11) Prep and teardown	7/29-8/6/2013
Summer Sunday (RHIC)	8/4/2013
DC East Window Upgrade and Related Repairs	8/19-9/27/2013
sPHENIX HCal Prototype Assembly/test	8/19-10/15/2013
Labor Day Holiday	9/2/2013
Repair upgrade, reassemble VTX/FVTX (pixels and strip-pixels)	7/11-10/13/2013
Test, survey (at Chemistry and IR) and re-install VTX/FVTX	10/16-10/27/2013
Other detector maintenance as required	As required
Infrastructure maintenance as required	As required
TBD prototype tasks	As required
Pre-run commissioning and prep for run 14	11/1-12/31/2012
Veterans Day, Lab Holiday	11/11/2013
Prep for EC roll in	11/1-11/9/2013
Roll in EC	11/10-11/12/2013
Prep IR for run	11/1-11/30/2013
Thanksgiving Holidays	11/28-29/2013
Pink/Blue/White sheets	12/14-12/31/2013
Christmas Holiday	12/24-25/2013
New Year's Day Holiday	1/1/2014
Start run 14	1/2/2014

Annual ISO14001 and OHSAS 18001 Registration

Continues Today

FAQ on OSH for Staff

<http://www.c-ad.bnl.gov/ESSHQ/SND/faqonism.htm>

FAQ on OSH For Managers

<http://www.c-ad.bnl.gov/ESSHQ/SND/faqforismfor%20managers.htm>

FAQs on OSH for Users

<http://www.c-ad.bnl.gov/ESSHQ/SND/faquser.htm>

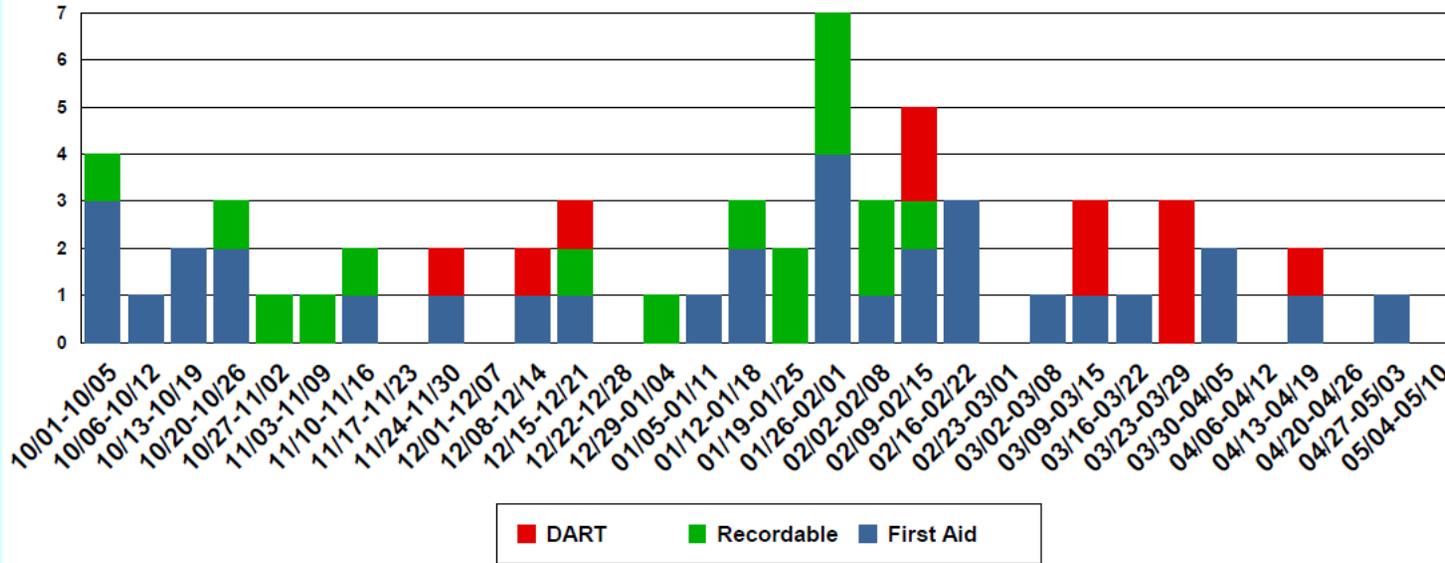
FAQ on EMS

http://www.c-ad.bnl.gov/ESSHQ/SND/faq_on_ems.htm

Training Report for Engineers and Techs updated. Mostly up to date. Please review your status and get your training up to date before shutdown starts.
Need to set up a CPR course for most of us.



Injuries Per Week (FY)
As of 5/10/2013



Injury Status:

FY13 YTD: DART – 11, TRC – 27, First Aid – 32

FY12: DART – 17, TRC – 35, First Aid – 70

FY11: DART – 30, TRC – 44, First Aid – 45

FY13 Injury Listing: <https://intranet.bnl.gov/esh/shsd/seg/Occlnj/BNLInjuries.aspx>

Recent Injuries	
	None

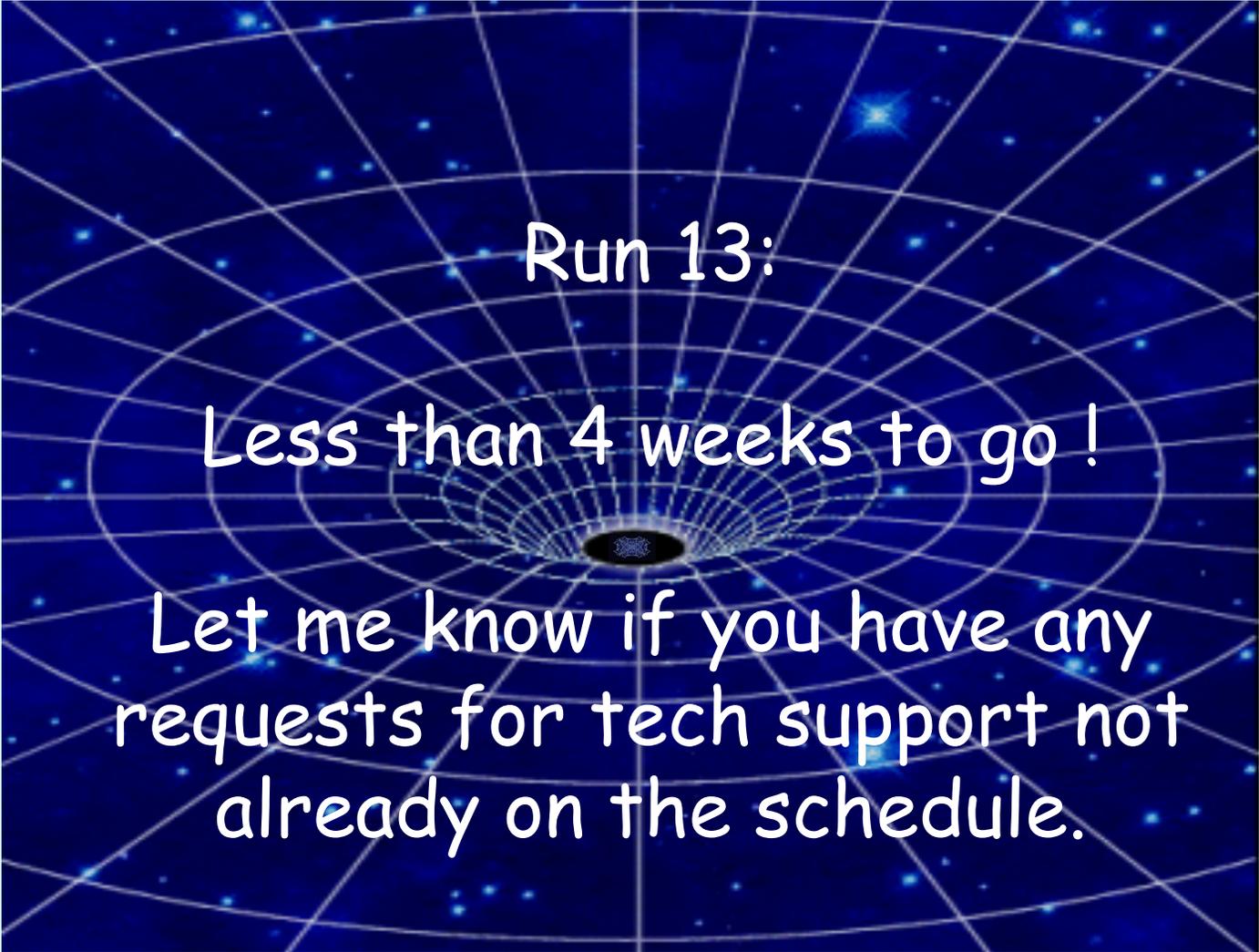


PHENIX SCIENCE REPORT NORM

Recent Events		
5/8/13	Non-Reportable	An electrically powered overhead roll-up door, at the Building 743 loading area, failed as it was being raised to a height of ~10 feet, resulting in the door dropping rapidly to the floor. There were no injuries, and personnel had backed further away (~10 feet) from the door when abnormal noises were noticed as the door was opening. The door was immediately taken out of service, and Photon Sciences is conducting an investigation, including evaluation of similar roll-up doors. (Event Link)
5/7/13	Non-Reportable	A ride-on lawn mower slid down an embankment on the north side of Building 703, resulting in nine concrete blocks being dislodged from the a wall along the walkway. There were no injuries, and superficial damage to the mower. F&O is conducting further investigation. (Event Link)



Where To Find PHENIX Engineering Info



Preakness Race
Saturday ~ 6:45 PM

My prediction:

- 1 Orb
- 2 Oxbow
- 3 Goldencents

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

