

PHENIX WEEKLY PLANNING



May 22, 2014

Don Lynch

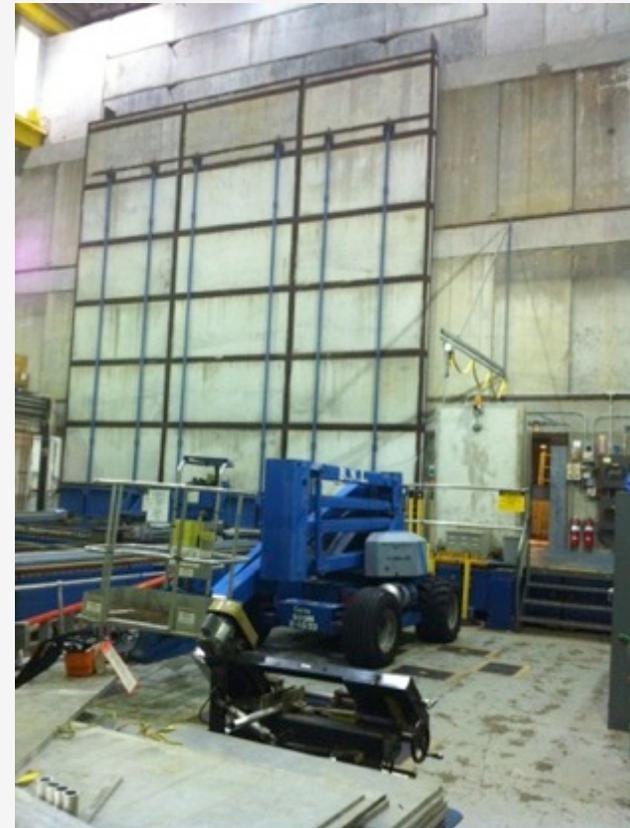
This Week

TECHNICAL SUPPORT NON

- Run 14 Continues
- Paul and Frank added temperature and air velocity monitoring for the 30 ton HVAC for the rack room, and John has it recording as of last week.
- Controlled access Today-
 - In the access, Frank, Sal, and Jimmy fixed

PC.W LV
EMC.W.T HV

- No scheduled maintenance this week
- Next maintenance access day 5/28/14
- Plan for 2014 Shutdown
- Tech Support for Run 14 as required
- Support for sPHENIX efforts as required



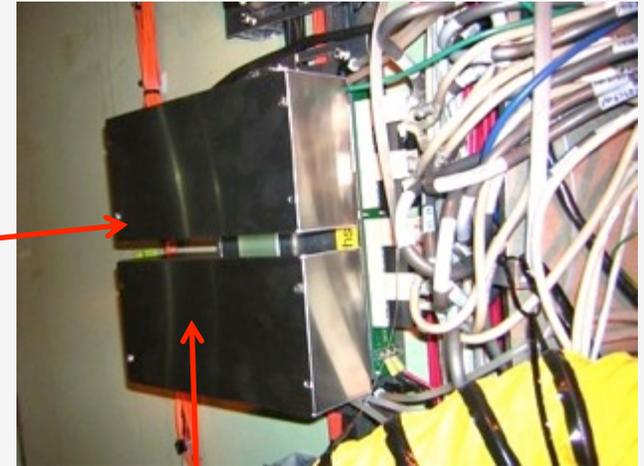
5/22/2014

Next Week

- Run 14 Continues
- Scheduled Maintenance Access next Wednesday 5/28
 - MPC-EX FEM board re-install
 - Other work?
- Plan for 2014 Shutdown
- Tech Support for Run 14 as required
- Support for sPHENIX efforts as required

MPC-Ex Initial (Partial) Installation

PHENIX PROJECT NORTH



FEM modules removed,
waiting for board rework

5/22/2014

2014 planned Technical Support & 2014 Shutdown

PHYSICS
 SUPPORT
 NORTH

Support for run 14	2/3-6/30/2014
Procure & Fabricate parts for MPC-Ex North and South	1/1/2014-6/30/2014
Assemble & test MPC-Ex South, ready for installation	3/1-7/1/2014
Set up Physics lab for FVTX/VTX east	6/15/2014
End of Run Party	6/27/2014?
MuID Efficiency Measurement (Itaru, requires cooling water & isobutane)	7/7/2014
Assemble & test MPC-Ex North, ready for installation	7/1-9/25/2014
Start of Shutdown Tasks (purge flammable gas, disassemble and stow shield wall, remove collars, move EC to AH, Move MMS south, etc.)	7/14 - 7/25/2014
Remove FVTX/VTX East to PHYSICS?, repair and reinstall	7/14 - 9/15/2014
Remove MMS east vertical lampshade	7/28-7/30/2014
Troubleshoot intermittent water leak in MMS	7/30- 8/8/2014
Other Maint. In MMS	TBD
Reinstall MMS east vertical lampshade	TBD
Summer Sunday prep AH, tours and restore AH	7/30-8/15/2014
Install scaffolding in Sta 1 South	7/28/2014
Remove MPC-Ex prototype, Install new MPC-Ex South	7/28-8/22/2014
MuTr Sta 1 South troubleshooting and repairs	7/28-8/22/2014
Maint. & Repairs for MPC South, BBC South, RPC1 South, MuTr sta 1 South, as necessary	7/28-8/22/2014
Remove scaffolding from sta 1 south, Move CM South	8/25/2014
Install scaffolding in Sta 1 North	8/26-8/29/2014
MuTr Sta 1 & Sta. North troubleshooting and repairs	8/29-10/17/2014
Prep MPC-Ex North installation area	9/1-9/26/2014
Install new MPC-Ex North	9/29-10/17/2014

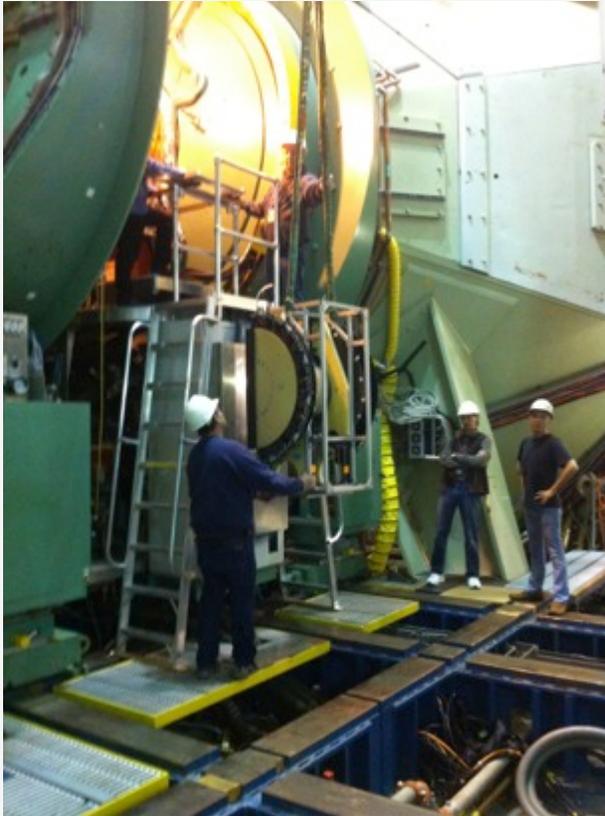
2014 planned Technical Support & 2014 Shutdown (cont'd)

PHENIX
 TECHNICAL
 SUPPORT
 NORTH

Remove Sta 1 North scaffolds, Move CM North	10/20-10/24/2014
Other detector support	TBD
Infrastructure Maintenance and Improvement	TBD
Decommissioning of obsolete PHENIX detector equipment	TBD
sPHENIX Support	on-going
End of Shutdown Tasks (Move MS north, roll in EC , install collars, remove 10 ton cart, plates and manlifts, build shield wall, etc.)	
10/27-11/26/2014	
Pink/White/Blue Sheets	1/17/2014
End of Shutdown Party	????
Start Flammable gas flow	????
Close shield wall, install radiation interlocks and prepare for run 14	12/31/2014
Start run 15	1/2/2015

Muon Tracker Shutdown Work List - summer 2014

- testing as MPC-EX installed, particularly before closing Sta-1's
- fix North Arcnet - N.2.7.1, North Sta-2 Oct-7 Chassis-1 (bad cable?)
- fix packets that were disabled for Run14
 - 11035,36 - South Sta-1 Quad-4 Chassis-3
 - 11267,68 - North Sta-2 Oct-7 Chassis-2
- replace boards for most frequent FEM problems from run
 - 11195 - North Sta-1 Quad-3 Chassis-3?
 - might have already done this; check history (changed RX 3/14/12)
 - 11064 - South Sta-2 Oct-3 Chassis-3 - unreachable
- N341 HV trip problem?
- auto-reboots of ArcNet and iocondev's for calibration?
- Access needed:
 - South & North Sta-1
 - Inside North Sta-2 on bottom
- Main Issue - Manpower



VTX/FVTX east repairs/
upgrades required

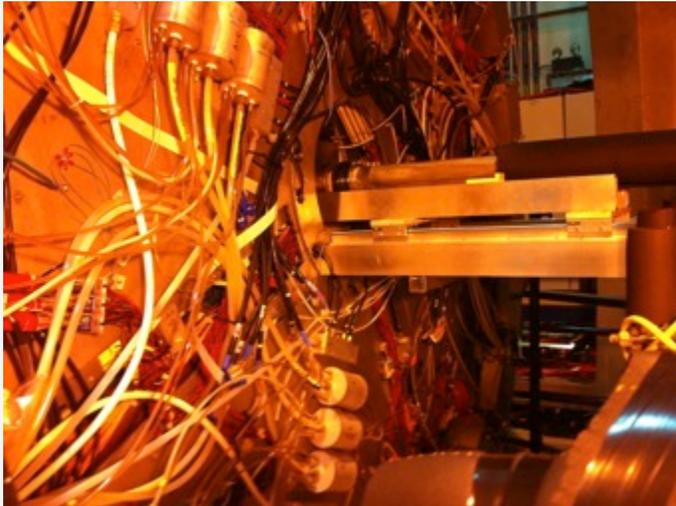
West to remain installed

Need to get PHYSICS
FVTX/VTX lab ready by
~ mid June



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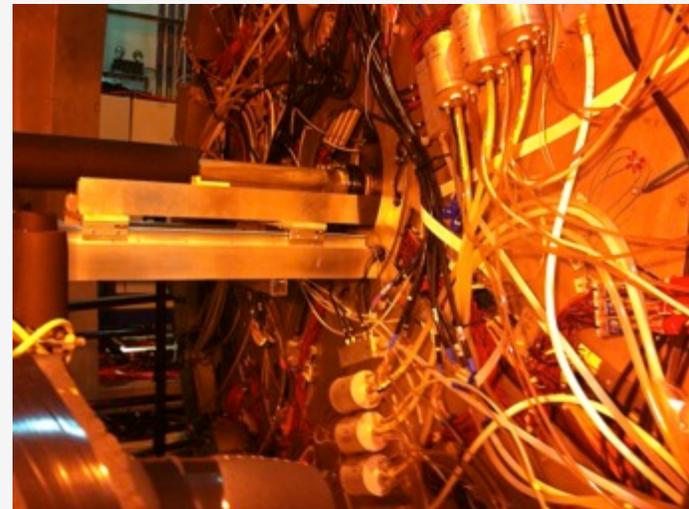
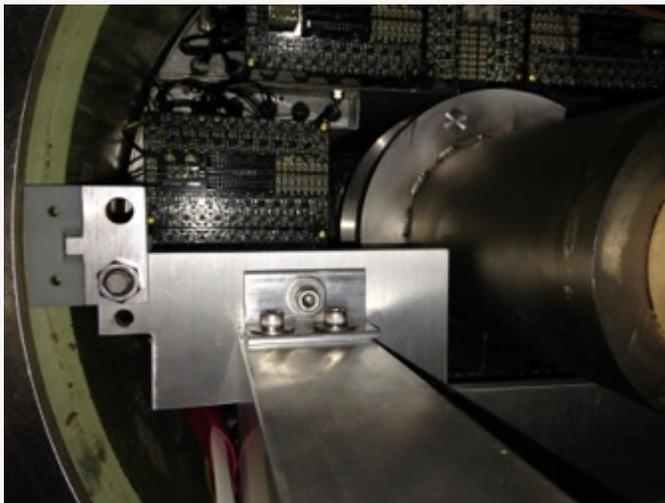
MPC-Ex N & S Final Installations This summer



Working on North BP support design

Tungsten plates received, QC acceptable

Check production schedule for modules and boards



5/22/2014

From John LaJoie, MPC-Ex Schedule considerations

- (1) Stony Brook in charge of MPC-EX testing that will be happening from now through the end of MPC-EX construction and installation.
- (2) Tom Hemmick is leading a test beam effort at SLAC June 20-30th. They will test one MPC-EX hemisphere with 8 tungsten layers and 4X and 4Y carrier boards with only one MPC-EX micromodule on each layer, for a total of 8 MPC-EX micromodules. Expect the partial assembly will return to BNL shortly after the 30th (say after the 4th of July holiday).
- (3) At the present time at BNL we have the tungsten plates and all production X, Y carrier boards. Carrier is that they will be sent to ISU for testing (that's where the labor is) and then come back to BNL. Testing should take ~ 1 week. Once the tested carrier boards come back to BNL they can be bonded to the tungsten plates. Frank to do this as he did the lamination previously for the Run-14 prototype. Once the bonded tungsten and carrier boards are available we should have everything on hand to mechanically assemble the detector. This leaves power boards and micromodules (see below).
- (4) Steve Boose has 6 of the second revision MPC-EX power boards. Andrey has asked for one, and Stony Brook will need one for some time at least to test the power setup and micromodule pedestals. This should leave 4 of the second revision boards in Steve's hands, enough for both MPC-EX arms.
- (5) Micromodule assembly is way behind schedule. We needed to make a parts change in the capacitive split that delayed assembly of the ROCs at Sierra. There were some other minor issues, but the first 50 of the remaining ROCs should be at BNL this week with the remaining 350 following in a few days. They will need to be sent to QuikPak to have the SVX4's wire bonded and encapsulated, and then they are available for lamination. All other parts and 200 sensors are already on hand at BNL, so once the assembly line starts rolling assembly and testing can hopefully proceed quickly.

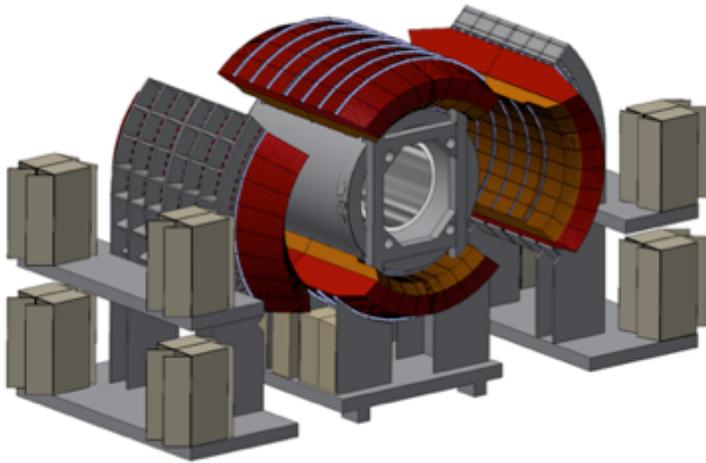
We have about 30 micromodules assembled with the capacitor arrays with large crosstalk. These are at ISU (for the most part) and we have a rework shop in the midwest working to replace the arrays. These still lack the spacers so they likely have noisy pedestals and will be backup modules.

MPC-Ex Schedule considerations, Cont'd

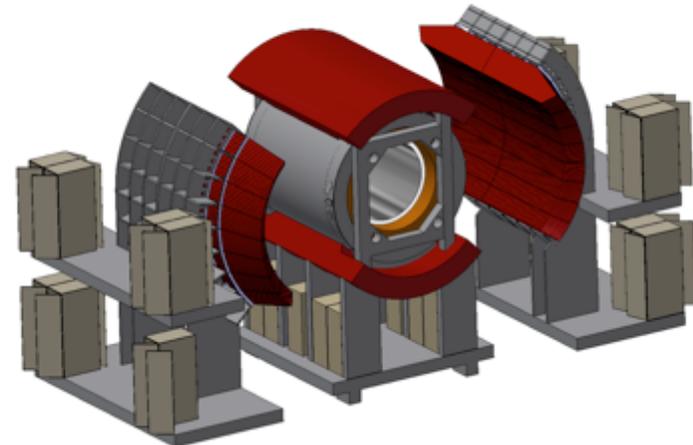
(6) Sensor testing at Yonsei is proceeding well, and we should have the remaining 200+ sensors from Yonsei by the end of June. We already have almost all the sensors we need for the south MPC-EX.

(7) The electronics for the FEM is designed and is at Sierra awaiting a BNL PO for manufacture and assembly. The FEMs have four readout inputs, so there will be eight FEMs per arm. I think you could mount two FEMs per box, that that means four locations on the magnet for each arm (Andrei should confirm).

sPHENIX “Outie” Concept



sPHENIX “Innie” Concept



We are back to working both designs until tradeoff studies are complete

Meeting yesterday with Mag Div. to finalize magnet transportation:

SMD has agreed to these tasks:

- moving the magnet
- cold testing it
- putting some modest current through it and organizing the testing
- designing modifications to the stack assembly as determined by sPHENIX\

Mike Anarella will manage these tasks.

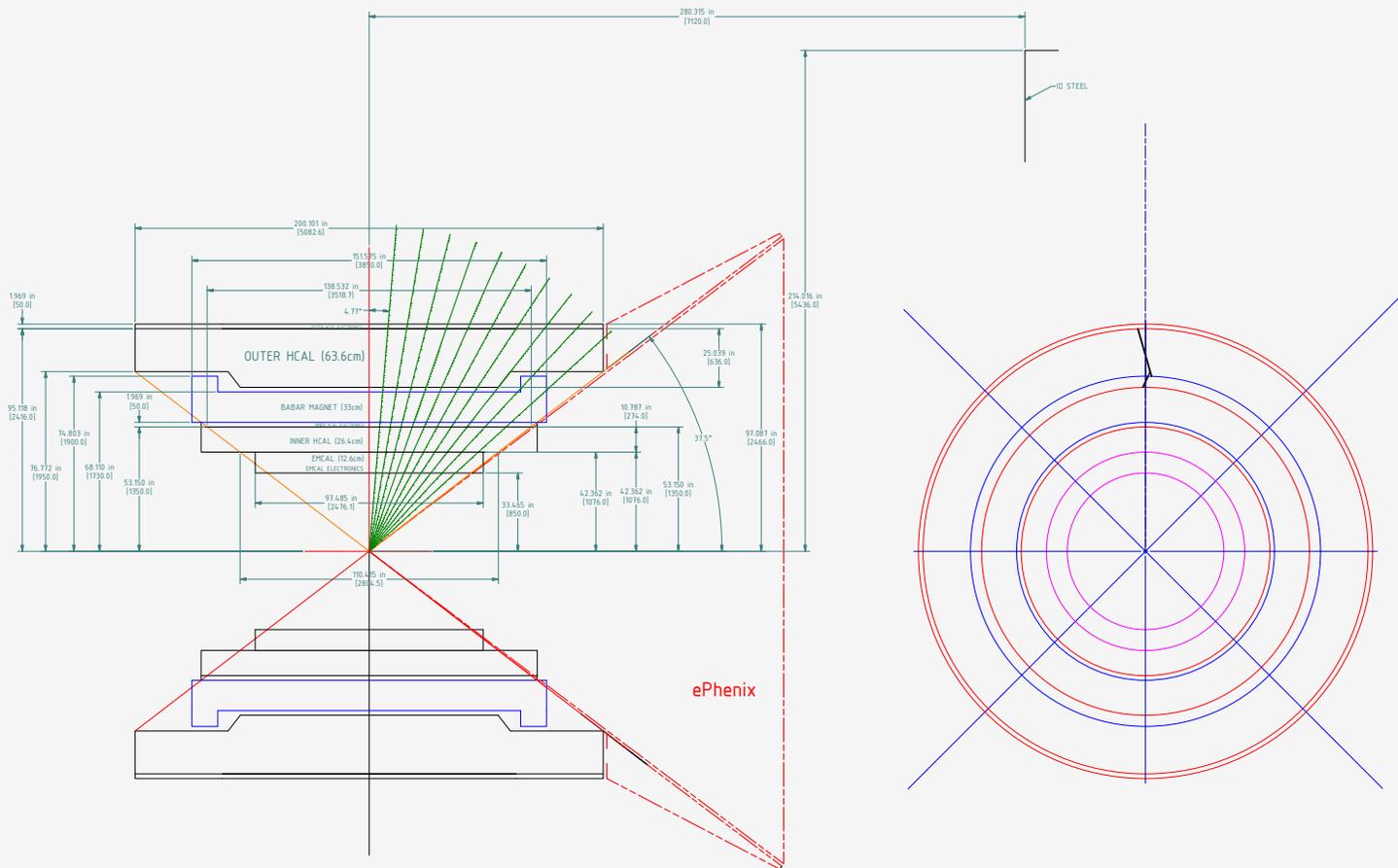
Action item #1 In 2 weeks sPHENIX will provide an envelope drawing which can be used to estimate the cost of modifying the stack.

Action item #2 Mike will make a simple high level project file with the tasks that SMD will take leadership on by late June or early July.

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Action item #3 The goal should be to have a Magnet Transport contract in place by July 1. Paul Kovach discussed preparations for the magnet move. The thermal shield restraints are in central shops being estimated and built. He has had some difficulty with PPM getting quotes for the move.

Regular sPHENIX Magnet meetings will take place on Wednesdays at 1pm. Next meeting in two weeks on June4.



"Innie" Envelope, Rev H

PRELIMINARY

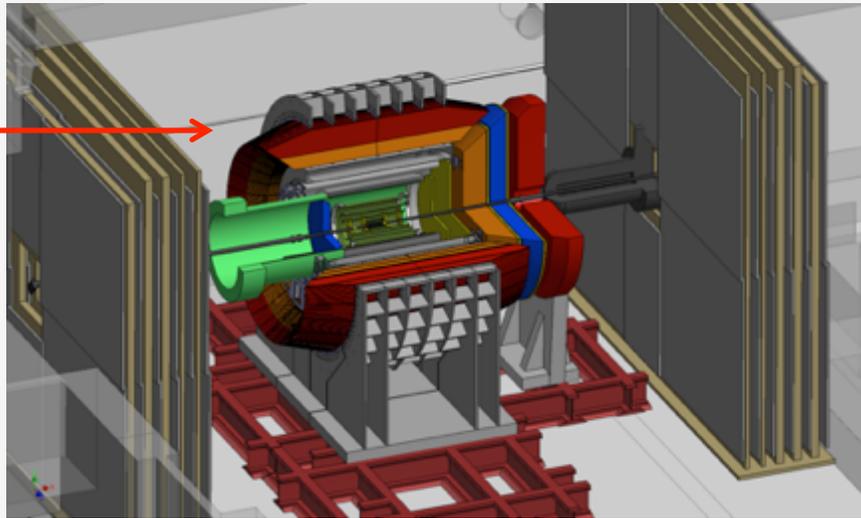
BROOKHAVEN NATIONAL LABORATORY Upton, NY 11973	
PROJECT	PHENIX
PACKAGE	sPhenix
DESCRIPTION	sPhenix Envelope - Control
DATE	SP00-000-001 H
REVISED BY	
DATE	
APPROVED BY	
DATE	

May 22, 2014

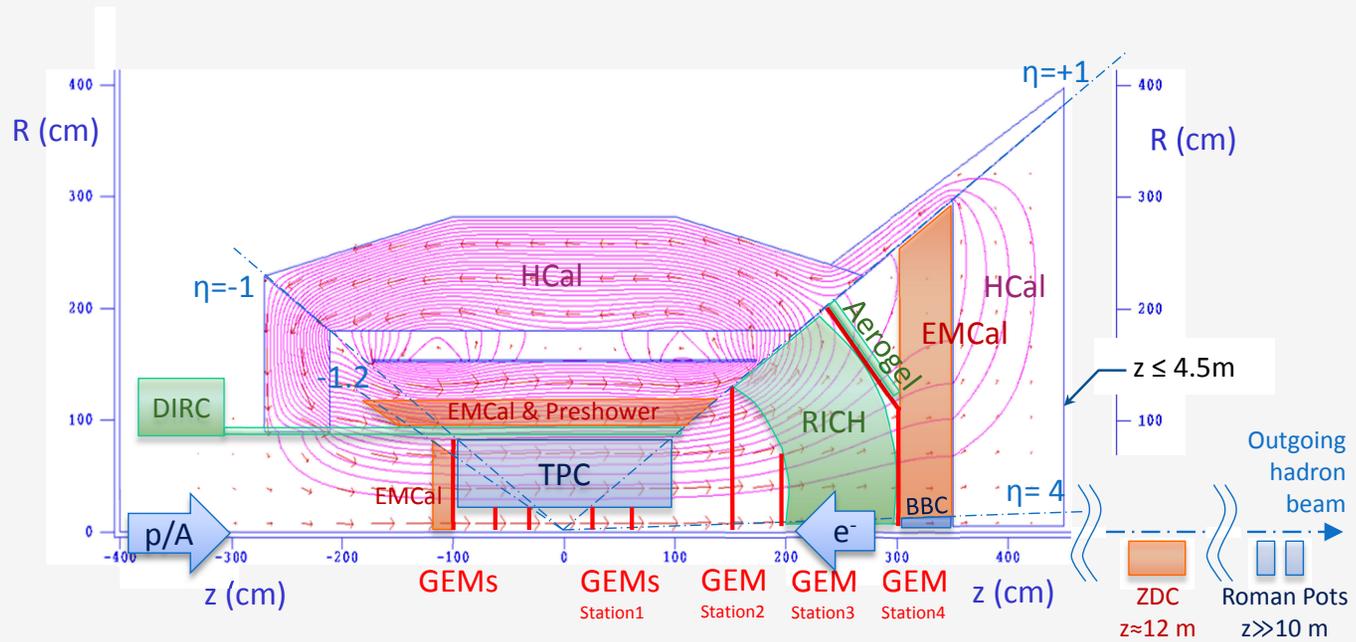
All involved in sPHENIX should make sure they have an up to date RCF account so that they can access the PHENIX Calendar and all meeting slides and to access the PHENIX drawings and Illustrations folders at:

<https://www.phenix.bnl.gov/WWW/p/draft/donlynch/sPHENIXfigures/>

2ft high x 1 ft wide clearance needed for e-ring components



ePHENIX



Safety and Security

1. From Ray Karol:
 - ES&H Review week of June 2- compliance with ladder safety training will be a subject
2. New SBMS on Document Control (Configuration Management)

Requirement	Document Type			
	Plans, Manuals, Procedures, or Work Instruction	Controlled Form/Checklist	Operator Aid	External Document
<i>Unique Identifier</i>	Y	N	N	N
<i>Revision Designation/Date</i>	Y	Y	N	N
<i>Staff Review/Approval</i>	Y*	Y	N	N
<i>Periodic Review</i>	Y	(If changes to the associated processes)	(If changes to the associated processes)	N
<i>Documented Review</i>	Y	N	N	N
<i>Review History</i>	Y	N	N	N
<i>Issuer, e.g., responsible person/organization who issued/posted it</i>	N	N	Y	N

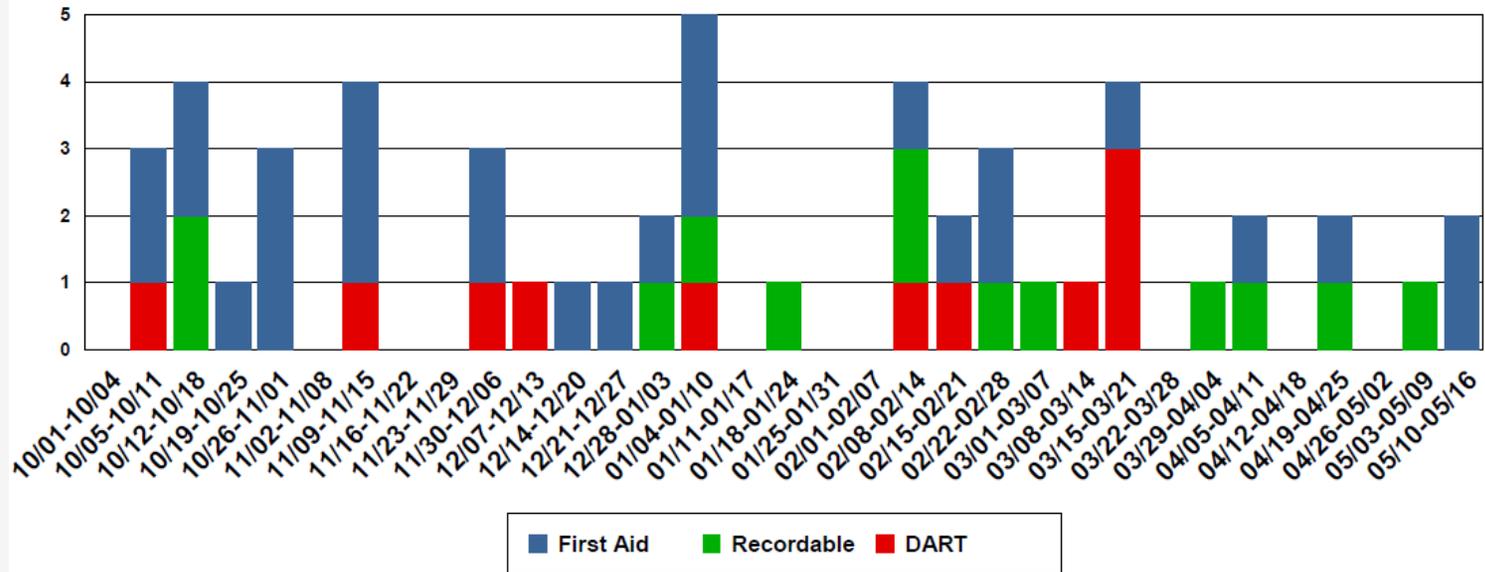
3. From Michael Hauptmann (new lessons learned)

Near miss as modified ceiling tile falls to floor in laboratory (PNNL)

(positive pressure clean room)

PHENIX Safety and Security

Injuries Per Week (FY) As of 5/16/2014



Injury Status:

FY14 YTD: DART – 11, TRC – 24, First Aid – 28

FY13: DART – 16, TRC – 38, First Aid – 53

FY12: DART – 19, TRC – 36, First Aid – 69

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

Recent Injuries		
5/15/14	First Aid	An employee reported to the OMC of a suspected foreign body in his hand. First aid was given and the worker returned to normal duties.
5/14/14	First Aid	An employee was fanning packs of paper, part of a newly assigned repetitive task, and developed wrist pain. At the OMC, first aid was given.



Recent Events		
5/14/14	Non-Reportable	While backing up a government vehicle, a Collider-Accelerator Support Watch accidentally hit a low-height dumpster at the AGS Ring Road. This resulted in minor damage to the bumper of the vehicle. No injuries were sustained. (Event Link)
5/12/14	Non-Reportable	Less than 5 gallons of hydraulic fluid spilled on the pavement at loading dock #4 outside of Building 744 (NSLS-II Lab/Office Building 4). Empty Conex boxes were being loaded on a contractor flatbed truck for shipment off-site when a hydraulic line on the flatbed failed. There was no environmental impact and cleanup is in progress. (Event Link)
5/12/14	Non-Reportable	Approximately 1 gallon of oil leaked from a bus onto the pavement outside of Building 801 (Isotope Research Facility). There was no environmental impact and cleanup is in progress. (Event Link)

5/22/2014



Where To Find PHENIX Engineering Info

*Run 14 Continues!
Less than
1/1/2 months to go !*

Preakness Stakes Race at Pimlico in Baltimore: last Saturday (2nd leg of triple crown)

My Picks: 1. Ride on Curlin
2. California Chrome
3. Bayern

Actual: 1. California Chrome
2. Ride on Curlin
3. Social Inclusion

(Bayern finished 9th)



Memorial Day next Monday

Lab Holiday to remember those who paid for our freedoms with their lives

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