

# PHENIX WEEKLY PLANNING

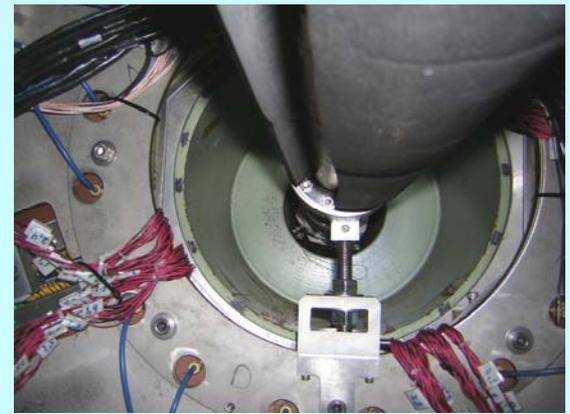
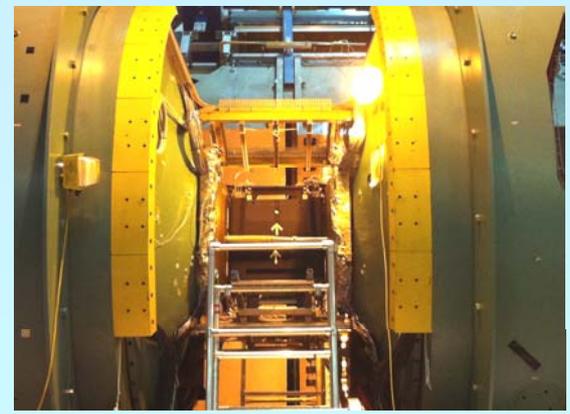


TECHNICAL SUPPORT ZONE

7/26/2012  
Don Lynch

TECHNICAL SUPPORT

- Finish MPC North Removal - Done
- Move VTX/FVTX to Chemistry - Done
- MPC-Ex measurements - Done
- Move CM north
- Prep for MuTr Station 1 South & Stations 2&3 N&S
- Remove MMS east vertical lampshade - Done
- Prep for DC West
- sPHENIX design support
- MPC-Ex design support

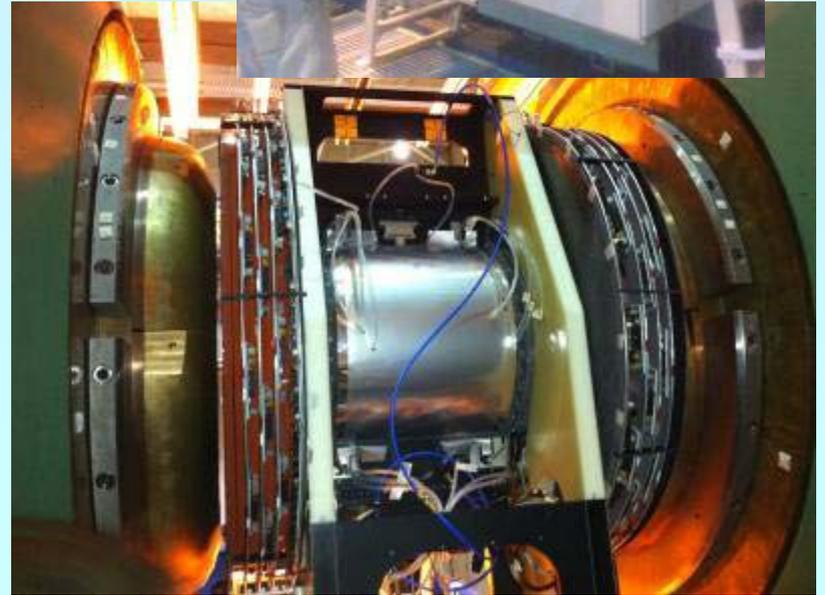
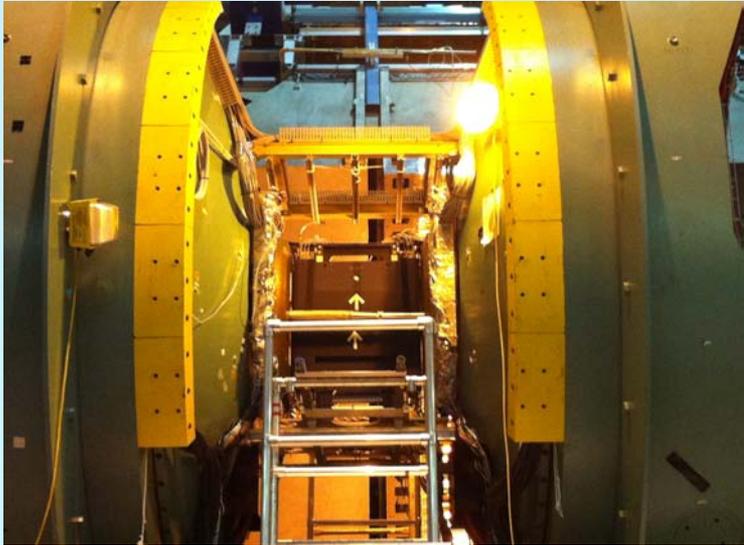


## Next Week

- MPC-Ex measurements
- Move CM north
- Erect MuTr Station 1 Scaffolding
- Prep for MuTr Station 1 South & Stations 2&3 N&S
- Remove MMN East vertical lampshade
- Prep for DC West
- sPHENIX design support
- MPC-Ex design support

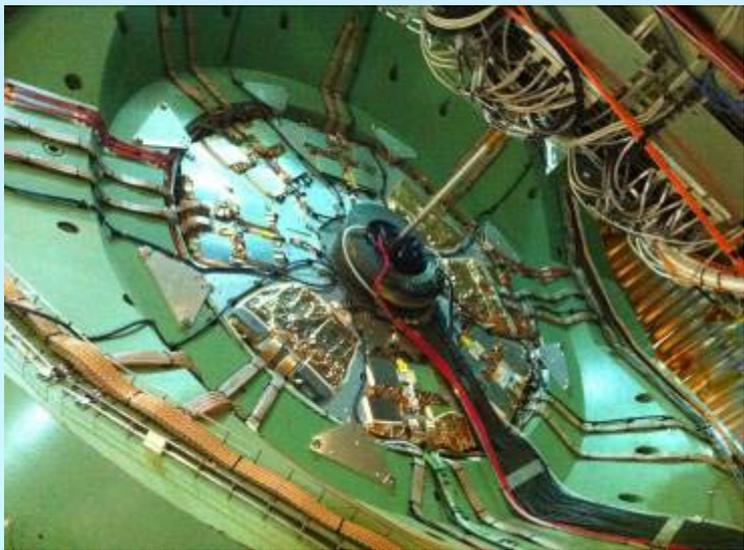
VTX Installation 2010 & 2011. 2012 Removal and re-installation will be same.

TECHNICAL SUPPORT NON



# RPC Station 1 North and South Cooling Upgrade

TECHNICAL SUPPORT



North



South

Work Permit Done

TECHNICAL SUPPORT ZONE



Looking towards RPC3 North  
← East                      West →

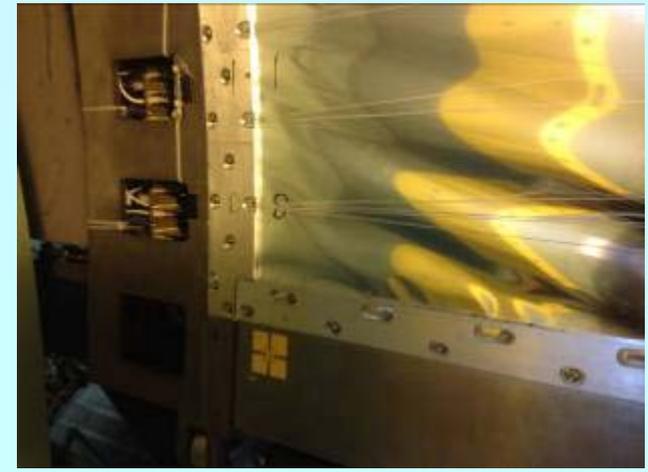
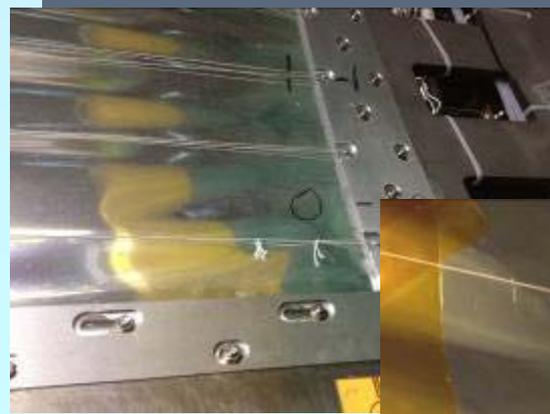
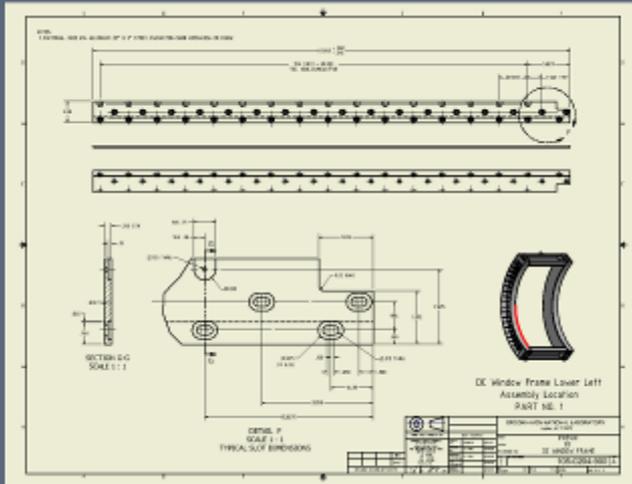


Looking towards RPC3 South  
← West                      East →



# DC West Upgrade Design and measurements

TECHNICAL SUPPORT NON



TECHNICAL SUPPORT NON

- Station-1 South re-capacitation and termination



WP Approved



vacuum lifting fixture



view when sta-1 removed (south)

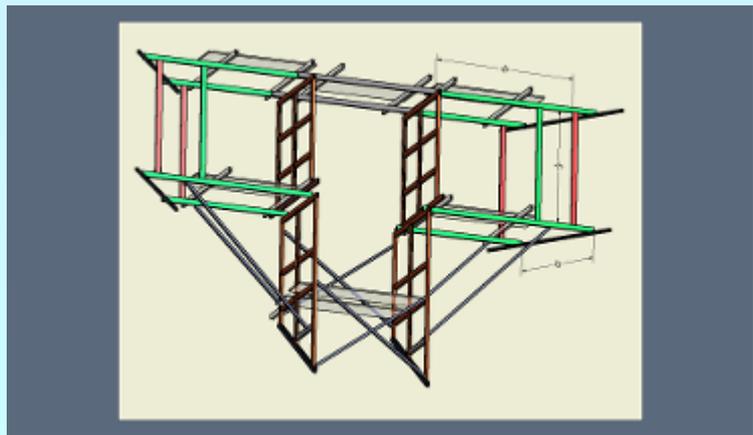
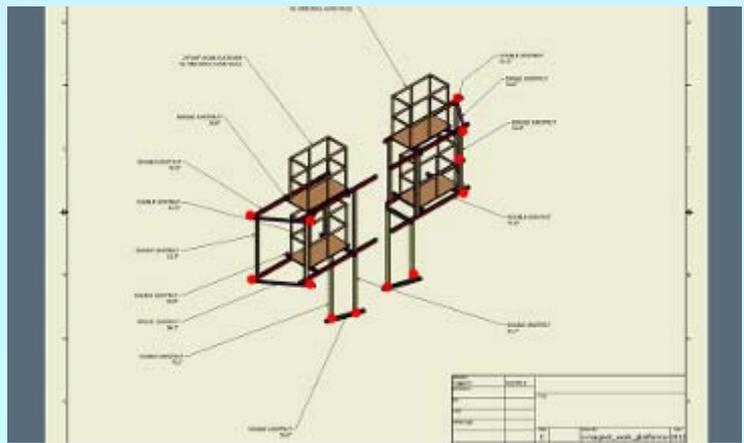
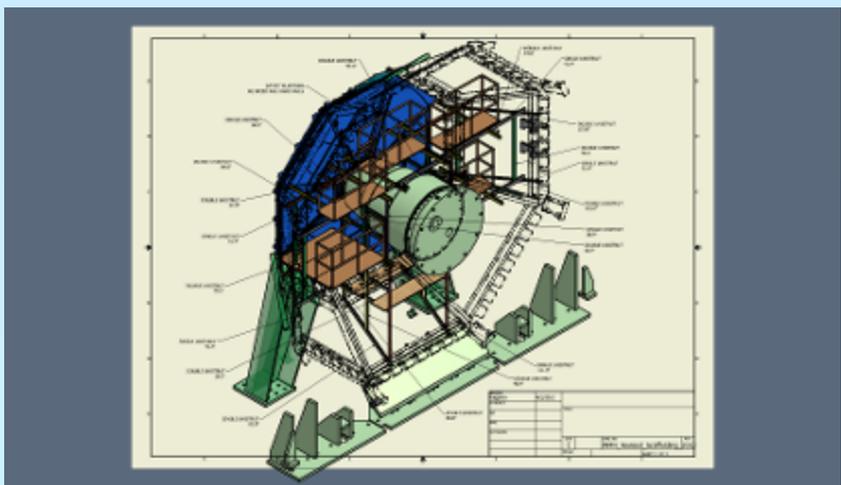
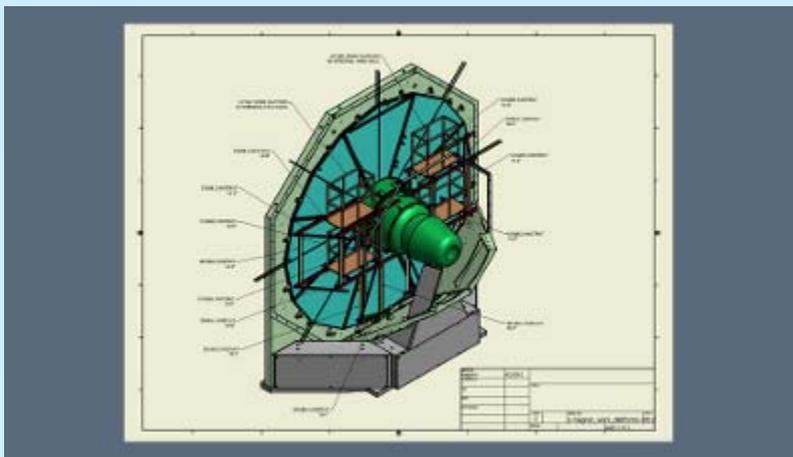


# Clamp-on Terminator Installation on North & South Station-3

- Lower clamp-on terminators already installed for both north and south sta-3 (bottom 4 octants)
- With new work platforms that reaches all of sta-3; install remaining (upper) clamp-on terminators.

2 WP's Submitted (N & S),  
Approved





MMS Work Platforms

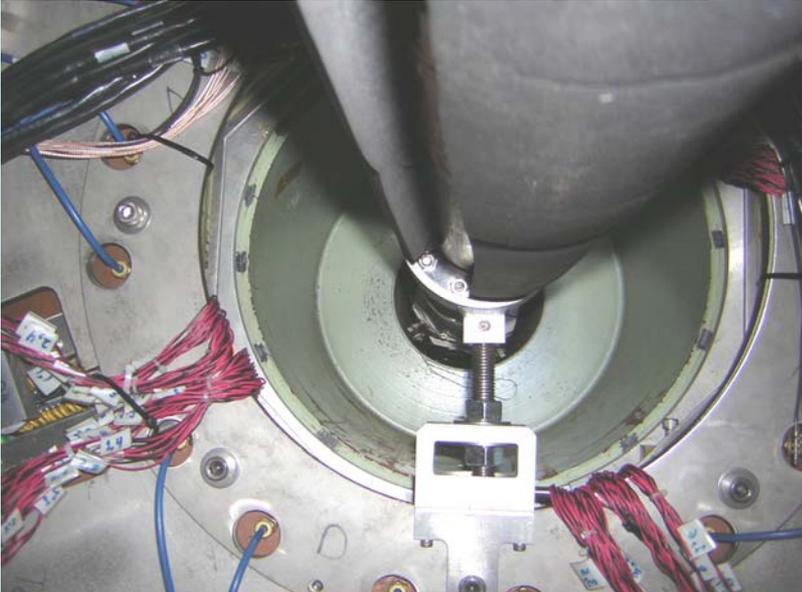
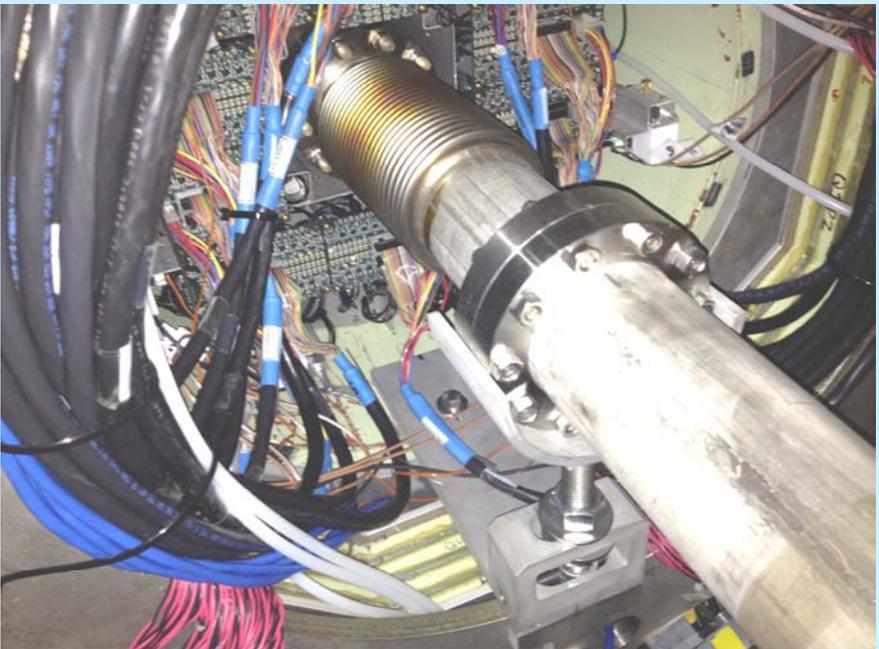
MMN Work Platforms

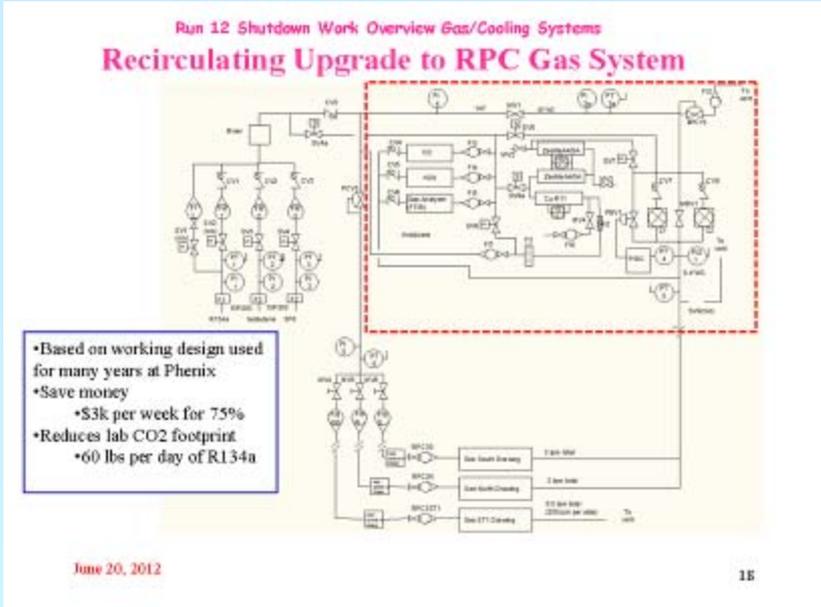
Design Approval Done, Bargaining Unit Agreement Approved

TECHNICAL SUPPORT NON

# MPC Repairs -

North MPC Removed for Evaluation





RPC Recirculation Upgrade

VTX/FVTX Cooling Upgrade



TECHNICAL SUPPORT NON

# MuID Collar IR Holding Area Support



- Structural support improvements designed
- Parts to be ordered
- Installation this fall prior to EC roll in

New Electrical Work for 2012 Shutdown, to be accomplished as time is available

- 1. Support CAD replacement of Assembly Hall 480V Fused Switch Panels #8H-1, 8H-2, and 8 EMH1. Coordinate temporary power patch while work is being performed and minimize impact on shutdown work.. - Done
- 2. Add Transient Surge Suppressor to 3 phase power panel on the Central Magnet Bridge.
- 3. The Gas Mixing House Breaker Panel for the Gas Mixing side is almost out of spare breaker slots and needs to be reviewed for increased capacity panel to replace it.
- 4. New computer rack replacements/additions for upcoming Run 13 & Rack Room computer infrastructure changes involving power distribution circuit (UPS and normal AC power) re-work - check with Martin Purschke

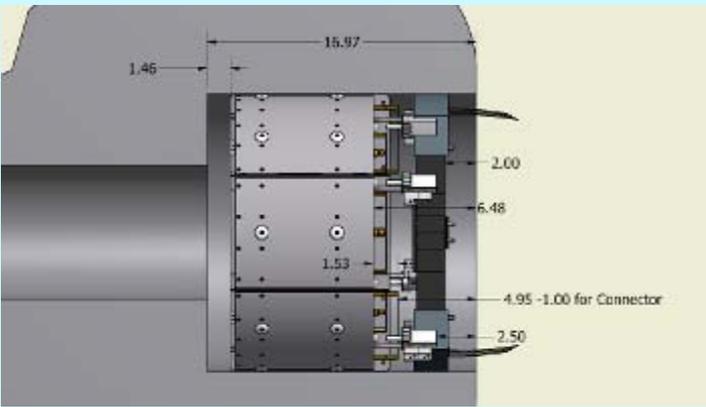
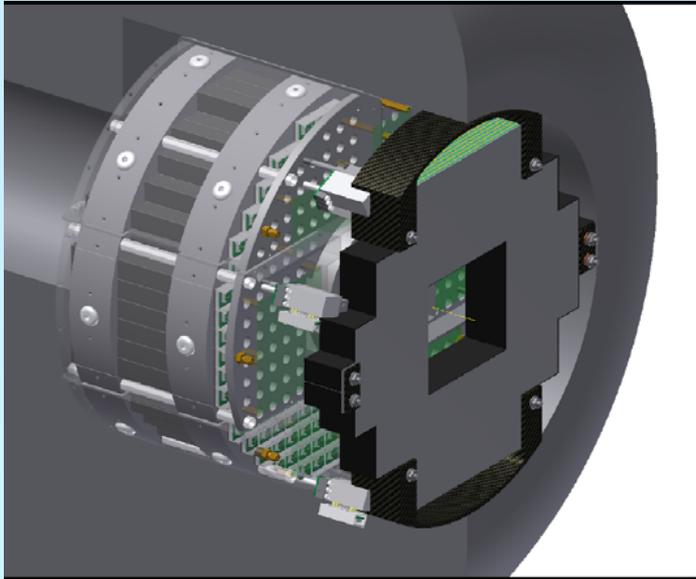
Additional Work for 2012, not yet scheduled, to be fit in as available

- 1. Replaced aging magnet hoses (CM only)
- 2. identify obsolete services passing through sill and remove them.
- 3. Cover for services coming from IR through sill.
- 4. Plan for stripping out TEC electronics and services to free up TEC racks.
- 5. Add limit switch and improved spooling control for window washer cable.

PHENIX Shutdown 2012 Electronics Upgrade /Repair

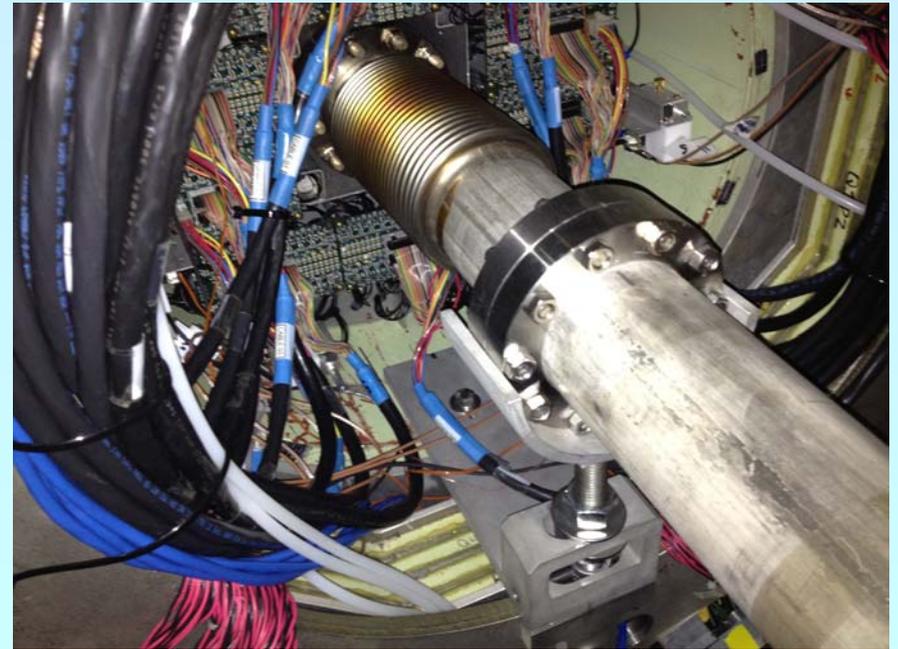
TECHNICAL SUPPORT ZONE

- Replace remaining RS-485 type ADAMs on West carriage with MODBUS/TCP type.
- Install Ethernet switches and MODBUS/TCP ADAMs on Central Magnet arm.
- Install second MODBUS server in counting house.
- Install MTP patch bay and jumpers for FVTX in counting house.
- Add several backup MTP fibers from CH to IR



### MPC-Ex Upgrade

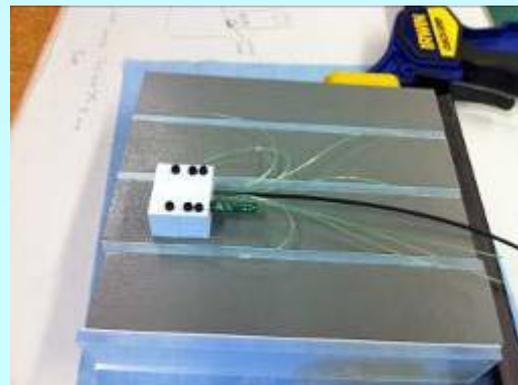
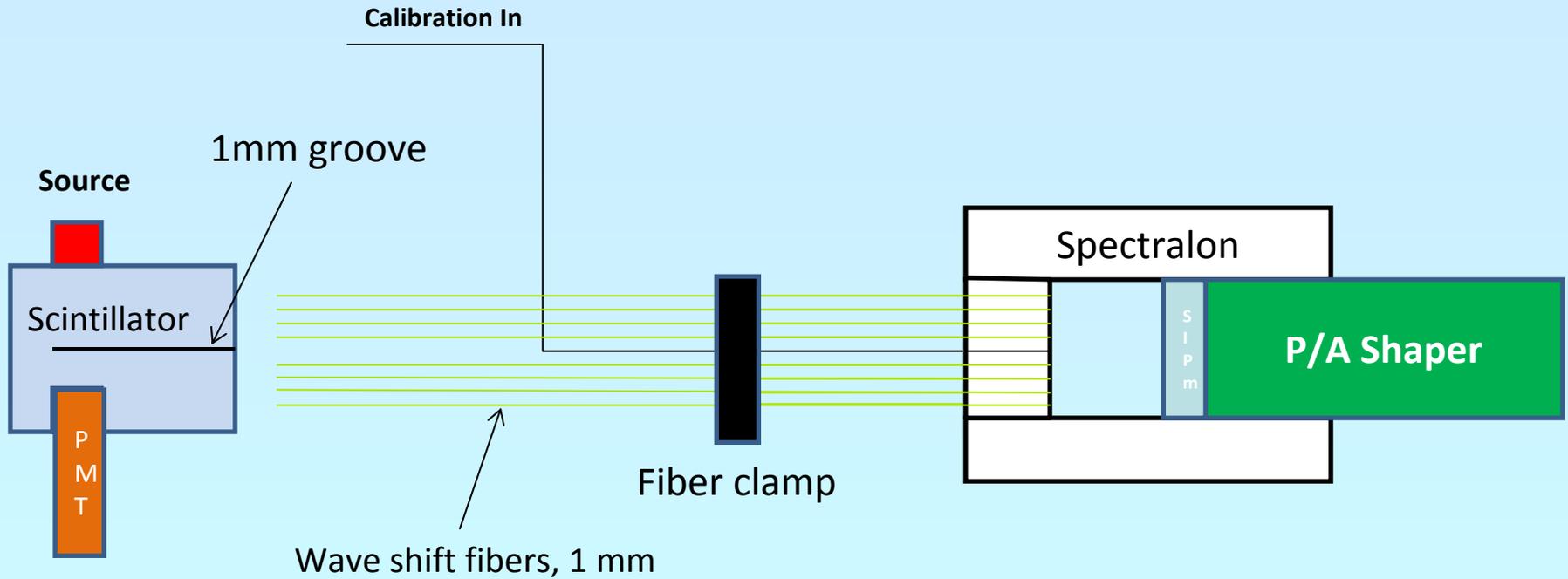
*We will be making measurements and test fitting mockups this summer in preparation for design and fabrication next fall, if proposed upgrade is approved*



North MPC 07/25/12

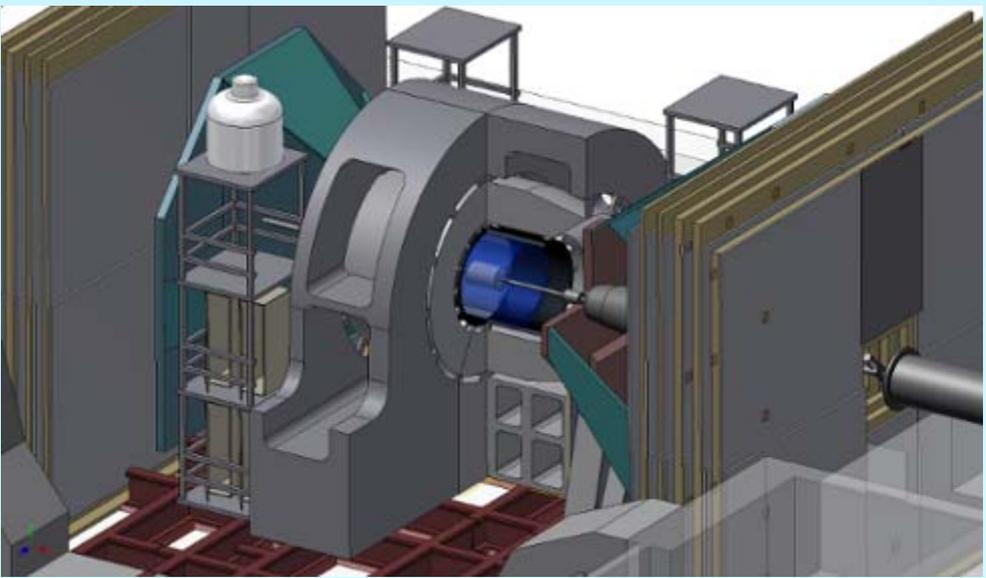
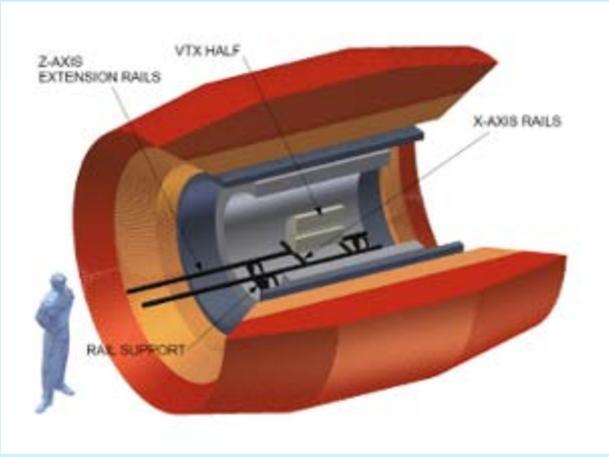
sPhenix H-Cal reverse integration cavity test

TECHNICAL SUPPORT NON



# sPHENIX Proposed Upgrade

We will be making measurements and observations to develop information concerning decommissioning and removal of some existing PHENIX subsystems, and integration of sPHENIX into retained PHENIX subsystems.



# Requested CAD Support for 2012 Shutdown

TECHNICAL SUPPORT ZONE

Riggers - Disassemble and stow moveable shield wall and plug door - week of June 25

Riggers and Carpenters - remove dumbwaiter and ladder from EC - week of July 2

Carpenter - Assist with Station 1, MMS, MMN and DC West scaffolding and work platforms  
- -7/23-Oct. 26 (2 weeks at beginning, 1 week at end, 1/2 days at various intervals between)

Articulated manlift - For removal and re-installation of MPC N - weeks of 7/9 and 10/16

CAD Mech techs - remove and restore MMS and MMN lampshades - week of 7/23

Survey - VTX/FVTX at Chemistry and PHENIX IR - 10/8-11/9

Riggers - transport VTX/FVTX to IR from Chemistry - week of 10/29

Carpenters and Riggers - erect and disassemble Summer Sunday dance floor - 8/1-8/7

Riggers and Carpenters - restore dumbwaiter and ladder to EC - week of 11/26

Riggers - Assemble shield wall and Install plug door - 12/26-12/28

Blue Sheets and White Sheets - 12/3-12/21

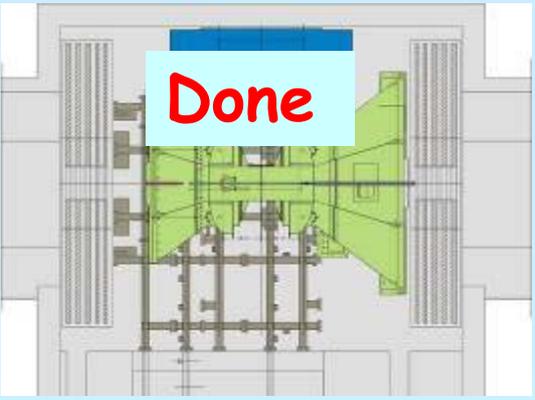
A/C evaluation and repairs, IR and rack room A/C's - complete by start of run 13

### Procedures for Shutdown 2012

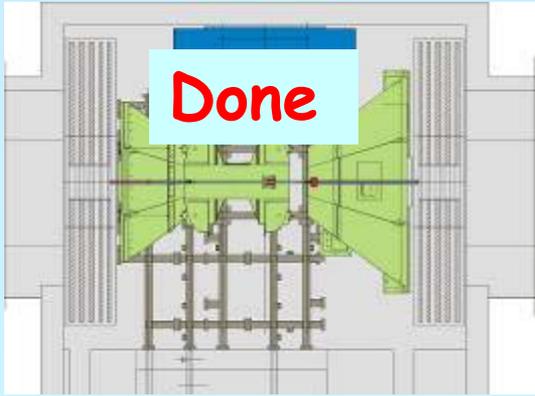
- Existing PHENIX General Purpose Recurring Task procedures - on line
  - VTX Removal - Done
  - FVTX/VTX installation - Done
  - VTX Survey - Done
  - FVTX Survey - Done
  - FVTX Cooling System Upgrades - Done
  - MuTr Maintenance & Upgrade (stations 1 2 & 3) - Done
  - MuTrigger Maintenance and Upgrade - Done
  - DC Repair - Incl. in WP
  - MPC removal and re-installation - incl in WP - Done
- Procedures will be part of 1 WP for VTX and FVTX
- Incl. in separate WP's for MMN and MMS entry

### Work Permits for Shutdown 2012

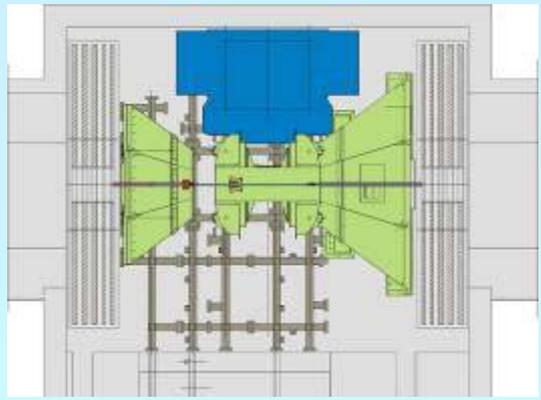
- Start of Shutdown (PHENIX) - Done
- VTX Removal/FVTX/VTX Installation - Approved
- MuTr/MuTrigger Maintenance and Upgrade 3 WP's: Station 1, MMN and MMS work - at CAD for Approval
- RPC1 Cooling Upgrade (PHENIX) - Done
- DC West Repairs - in Design
- MPC repairs - Approved
- End of Shutdown (PHENIX)



IR is currently in this (Run) configuration. (MuID collars not shown)



After MuID collars are removed and EC is moved to AH, MMS is moved south. CM is then moved south to gain access to Station 1 North. MPC North to be removed, RPC1 North to be addressed. (1 week)



CM is then moved north to gain access to station 1 south. Work on RPC1 South, DC West, MPC South and MuTr Station 1 South. After all work finished move CM south, reinstall MPC complete RPC1 North work, survey step 1 for beampipe, then move CM north complete beampipe and CM survey. Move MMS North to run position. VTX/FVTX work may be done in any configuration.

TECHNICAL SUPPORT ZONE

Shutdown Standard Tasks

- Open wall, disassemble wall, Remove MuID Collars,
- Move EC to AH, etc.

In Progress

VTX Strip-pixel post run tests

Done

FVTX post run tests

Done

Disassemble VTX/FVTX services

Done

Open Station 1 North, remove MPC North for repairs

Done

RPC1 North Cooling Upgrade (preliminary)

Done

Remove VTX/FVTX and transport to Chemistry Lab

In Progress

Remove MMS & MMN vertical East lampshades

In Progress

Summer Sunday (8/5) Prep and teardown

8/1-8/7/2012

Summer Sunday (RHIC)

8/5/2012

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MuTr South Station 1 work	
Install access (Sta. 1work platforms)	7/30-8/3/2012
Disconnect Cables, hoses etc, ID/label all	8/6-8/10/2012
Remove FEE plates and chambers	8/13-8/17/2012
Station 2 Terminators and manifold upgrade through access opened by station 1 removal	8/20/-8/31/2012
MPC South repairs	8/20-9/15/2012
RPC 1 South cooling upgrade	8/20-9/15/2012
Labor Day Holiday	9/3/2012
MuTr South Station 1 work (Cont'd)	
Clean/install new MuTr Sta. 1 chamber parts and upgrades (concurrent At RPC Factory)	8/20/-9/7/2012
Re-install chambers and FEE plates	9/10-9/14/2012
Re-cable, re-hose and test	9/10-9/28/2012
re-capacitation and air manifold upgrades	
Station 3 North and South (upper half)	7/23-9/30/2012
Repair upgrade, reassemble VTX/FVTX	7/23-10/5/2012
Test, survey (at Chemistry and IR) and re-install VTX/FVTX	10/8-11/9/2012
Substation breaker upgrade/test (CAD)	8/20-9/30
AH utility power distribution upgrade	8/20-9/30
DC West maintenance (replace window)	9/15-10/15
RPC stations 1 and 3, north and south maintenance	As required
Other detector maintenance as required	As required
Infrastructure maintenance as required	As required
TBD prototype tasks	As required
Open Station 1 North, re-install MPC North	10/16-10/26/2012
RPC1 North Cooling upgrade (if not completed earlier)	10/16-10/26/2012

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Veterans Day Holiday	11/12/2012
Pre-run commissioning and prep for run 13	11/1-12/31/2012
Prep for EC roll in	11/12-11/16/2012
Roll in EC	11/19-11/23/2012
Thanksgiving Holidays	11/22-23/2012
Prep IR for run	11/26-12/3/2010
Pink/Blue/White sheets	12/3-12/21/201
Christmas Holidays	12/24-25/2012
Start run 13	1/1/2013

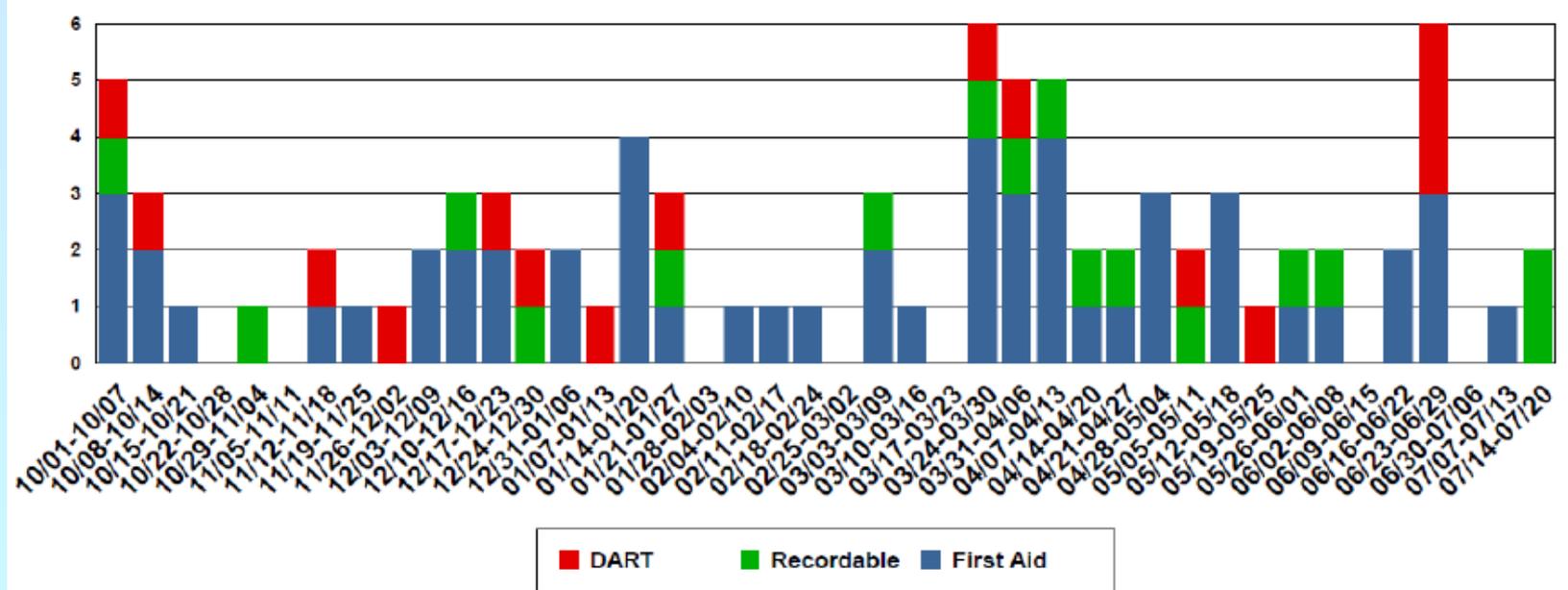
TECHNICAL SUPPORT ZONE

- 1. Ladder Safety - All fixed vertical ladders at PHENIX are out of service pending inspections. MMS Eyebrow ladder failed inspections and may not be used until deficiencies are corrected.
- 2. Stop Work - Review procedures
- 3. Tunnel is now not ODH area. Remains a controlled area with TLD required.
- 4. Long pants and closed shoes required past control room. This includes tours. Only Summer Sunday is excepted and only for visitors.



TECHNICAL SUPPORT ZONE

**Injuries Per Week (FY)**  
As of 7/20/2012



**Injury Status:**

FY12 YTD: DART – 15, TRC – 31, First Aid – 54  
 FY11: DART – 27, TRC – 42, First Aid – 45  
 FY10: DART – 19, TRC – 33, First Aid – 52

FY12 Injury Listing: <https://intranet.bnl.gov/esh/shsd/seg/Occlnj/BNLIInjuries.aspx>

Recent Injuries		
7/19/12	Recordable	A Service Contractor lacerated his arm performing janitorial work. He received first aid, refused transport to the ER at the time. The next morning, he reported to the OMC and was sent for sutures.
7/17/12	Recordable	An employee was walking when she tripped and fell, injuring her knee and breaking a tooth.

TECHNICAL SUPPORT NON

Recent Events		
7/19/12	Non-Reportable	Building 98 was evacuated due to a fire alarm. Fire/Rescue responded and determined it to be a false alarm. ( <a href="#">Event Link</a> )
7/17/12	Non-Reportable	Building 912 was evacuated due to an activated manual pull station. Fire/Rescue responded and determined that a contractor working in the building was banging on a piece of unistrut which caused the manual pull to open. The pull station and the alarm were reset. ( <a href="#">Event Link</a> )
7/15/12	Non-Reportable	Fire/Rescue responded to a smoke detector alarm in an office in Bldg 555. Upon arrival, there was no evidence of smoke or fire and the triggered alarm/detector would not re-set. The Site Supervisor was contacted and requested to inform the Alarm Shop to respond/address. ( <a href="#">Event Link</a> )
7/11/12	Non-Reportable	A liquid nitrogen storage dewar was observed venting nitrogen gas via a burst rupture disc. ( <a href="#">Event Link</a> )

# Where To Find PHENIX Engineering Info

July 26 This day in History

- 1267 Inquisition formed in Rome under pope Clement IV
- 1268 Rembrandt declares insolvency
- 1775 Benjamin Franklin becomes first Postmaster General
- 1835 First sugar cane planted in Hawaii
- 1887 First Esperanto book published
- 1917 J. Edgar Hoover gets job on ministry of Justice
- 1943 120 F (state record) recorded at Tishmoningo Oklahoma
- 1947 National Security act establishes CIA
- 1951 Netherlands ends state of war with Germany
- 1953 Fidel Castro begins rebellion in Cuba
- 1955 Ted Allen throws record 72 consecutive horseshoe ringers
- 1981 New York Mayor is given Heimlich maneuver at chinese restaurant
- 1990 Roseanne Barr sings National Anthem at Reds-Padres game
- 1993 Mars Observer takes 1<sup>st</sup> photo of Mars from 5 billion KM
- 2010 92,000 classified documents leaked by Wikileaks - largest leak in US history

[http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL\\_SSint-page.htm](http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm)

