

PHENIX Run-15 Preparations

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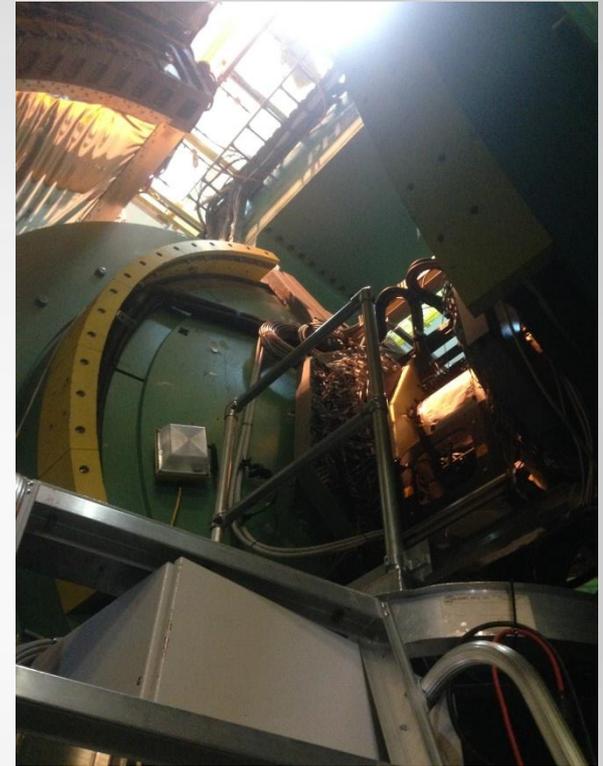
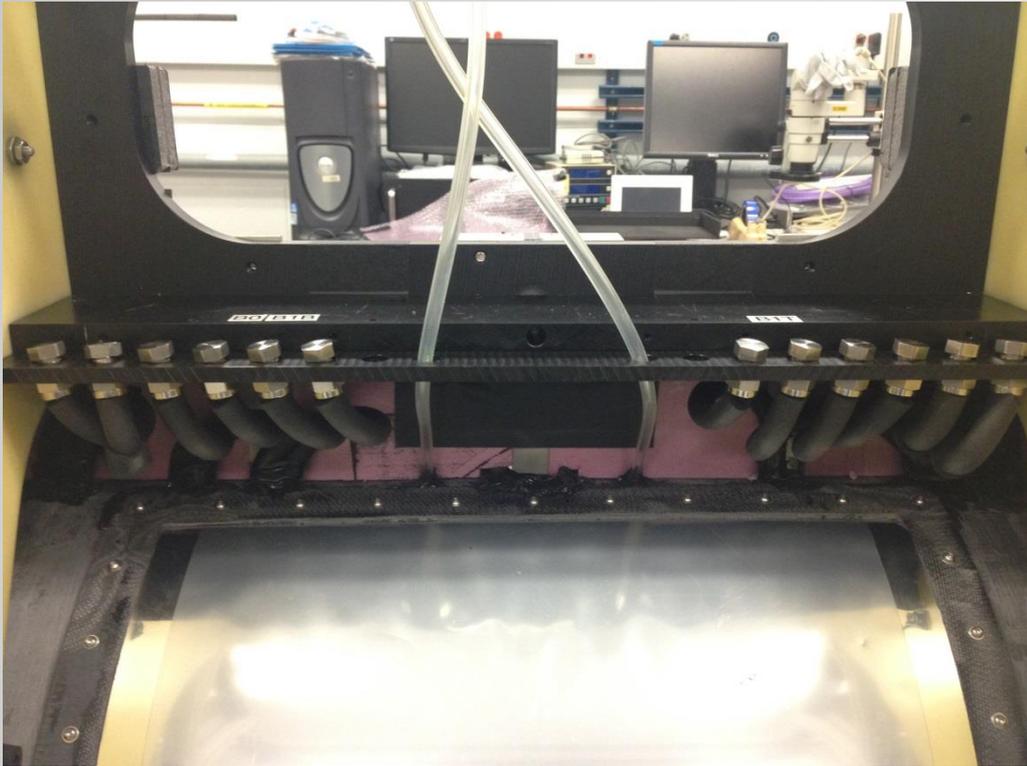


Status of Preparations

- PHENIX is still pushing hard to be ready for Run 15 start on January 27, 2015.
- Pink sheeting is complete.
- Blue sheeting is complete, signoff for flammable gas after shield wall roll-in.
- White sheeting should be complete today.
- Shield wall rolled in tomorrow.
- Full shifts began today.
- MPC-EX North and South being commissioned (more later).
- FVTX/VTX installed and being commissioned.



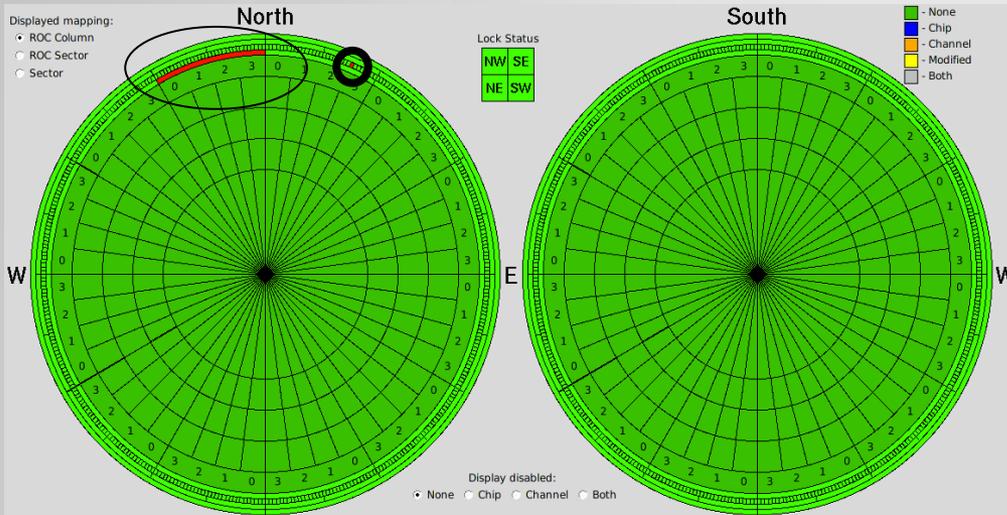
FVTX Status



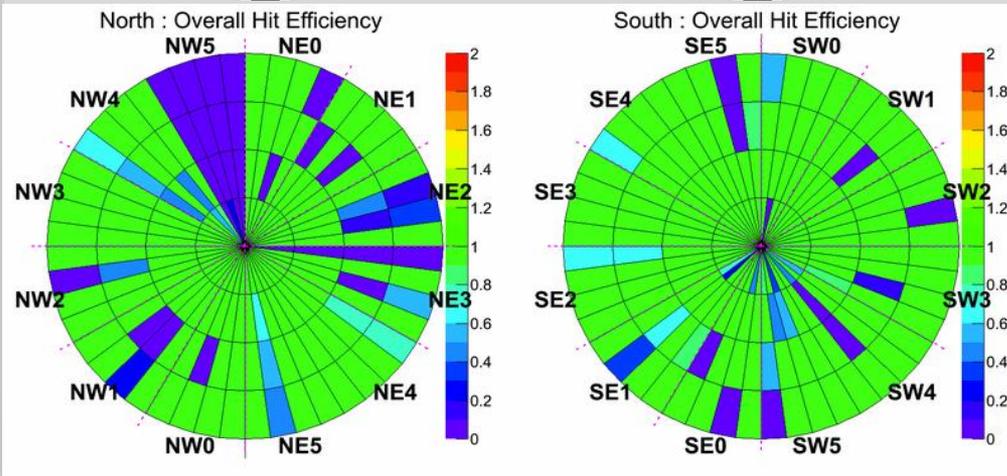
- Detector fully installed, cabled, insulated and closed up.
- Cooling system functioning at 10°C.
- Dry Nitrogen flowing.
- Have addressed condensation issues.
- Groups are now bringing detector back to operational.



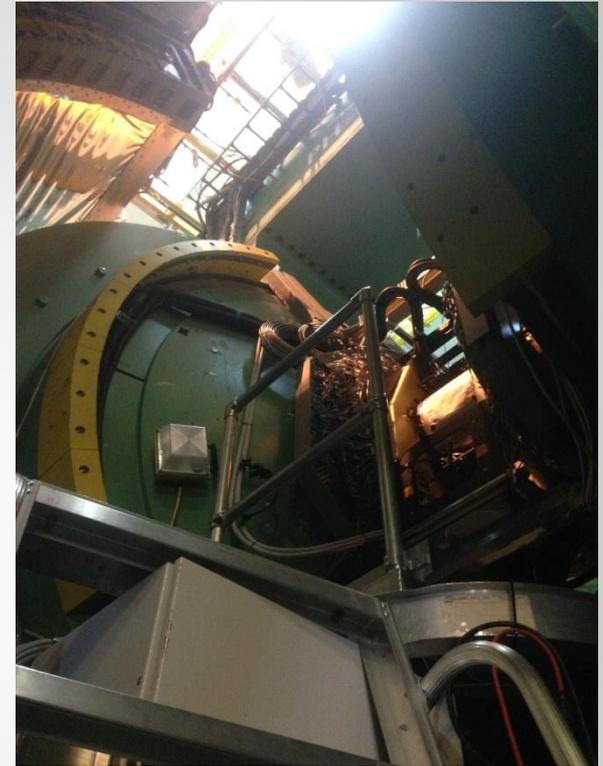
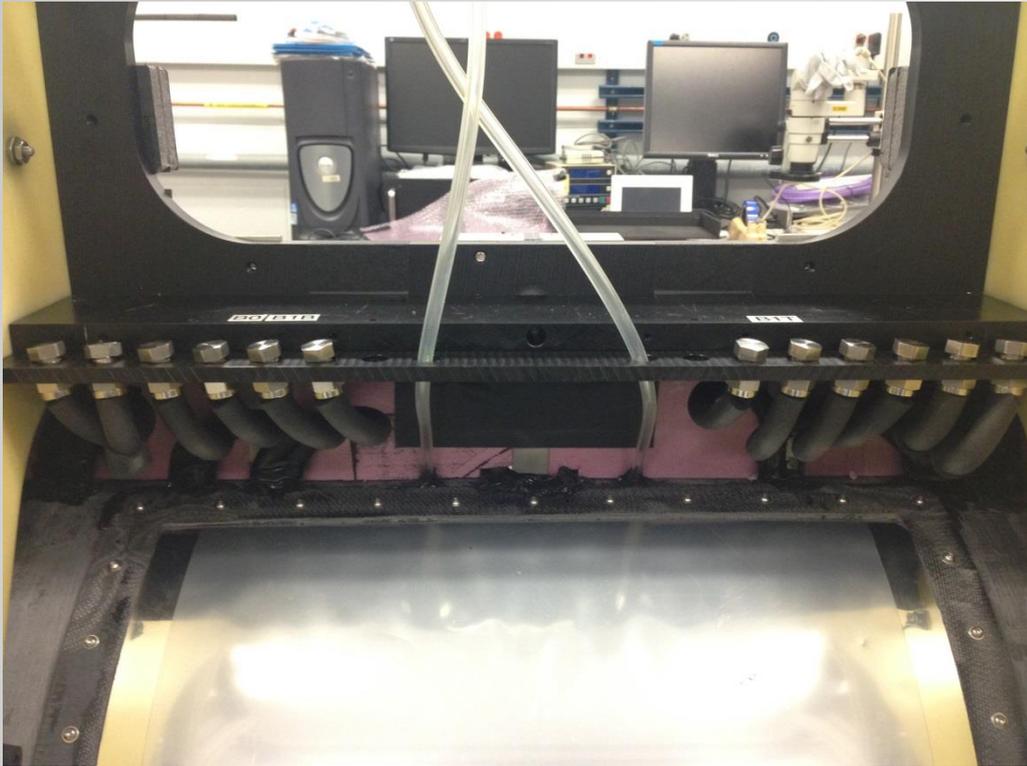
FVTX Status



- All fibers have sync, but NW5 because of a broken transceiver (top figure).
- Only 1 / 768 columns does not latch (top figure).
- No bias problems at this moment.
- Overall 85% hit efficiency according to the last calibration (bottom figure).
- Probably related to higher temperature (10°C vs. normal 0°C).
- Will reduce chiller temps tomorrow morning.



VTX Status



- Detector fully installed, cabled, insulated and closed up.
- Cooling system functioning at 10°C.
- Dry Nitrogen flowing.
- Have addressed condensation issues.
- Groups are now bringing detector back to operational.



VTX Pixel Status

Chip Map of WEST (Commissioning in Run-15 2015/1/16)

Pulse Test (sent pulse to col10 and 20)



LADDER	SPIRO	WEST		South								North								SPIRO
				15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
8	49	Barrel 0	B0-L4																	58
10	51		B0-L3																	59
5	71		B0-L2																	27
36	48		B0-L1																	28
17	47		B0-L0																	29

34	37	Barrel 1	B1-L9																	30
15	31		B1-L8																	16
35	38		B1-L7																	78
32	46		B1-L6																	17
40	39		B1-L5																	61
13	53		B1-L4																	18
11	40		B1-L3																	56
16	55		B1-L2																	20
6	41		B1-L1															57		
20	60		B1-L0														67			

↑ (2015/01/16)

Col#0 is always hot for two chips. Cannot mask. Good chip -> 50% Dead
No change from a test at Physics Lab except for 1 chip (B1-L0 chip#2).



VTX Pixel Status

Chip Map of EAST (Commissioning in Run-15 2015/1/16)
Pulse Test (sent pulse to col10 and 20)



LADDER	SPIRO	EAST		North									South									SPIRO	
				15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0				
25	12	Barrel 0	B0-L5	Good Chip																			72
39	13		B0-L6	Good Chip																			73
9	14		B0-L7	Good Chip																			74
23	69		B0-L8	Good Chip																			76
19	68		B0-L9	Good Chip																50% Dead	Good Chip		77
29	32	Barrel 1	B1-L10	100% Dead	Good Chip																		21
30	54		B1-L11	100% Dead																			62
33	33		B1-L12	Good Chip																			22
31	52		B1-L13	Good Chip																			63
22	70		B1-L14	Good Chip																			24
27	50		B1-L15	Good Chip																			64
12	35		B1-L16	Good Chip																			25
26	43		B1-L17	50% Dead	100% Dead	Good Chip																	65
14	36		B1-L18	Good Chip																100% Dead	Good Chip		26
21	42		B1-L19	Good Chip																	100% Dead	2	Good Chip

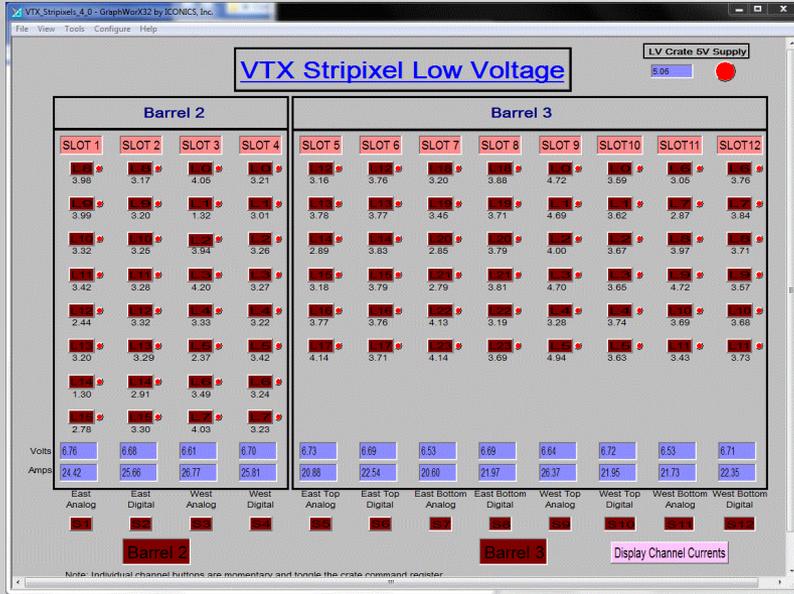
(2015/01/16)

Good chip -> 50% Dead

No change from a test at Physics Lab except for 2 chips (B0-L9 chip#7 and B1-L17 chip#14).



VTX Stripixel Status



1) - Inspected cables connections, LV, HV, optical cables. Issues were found and fixed

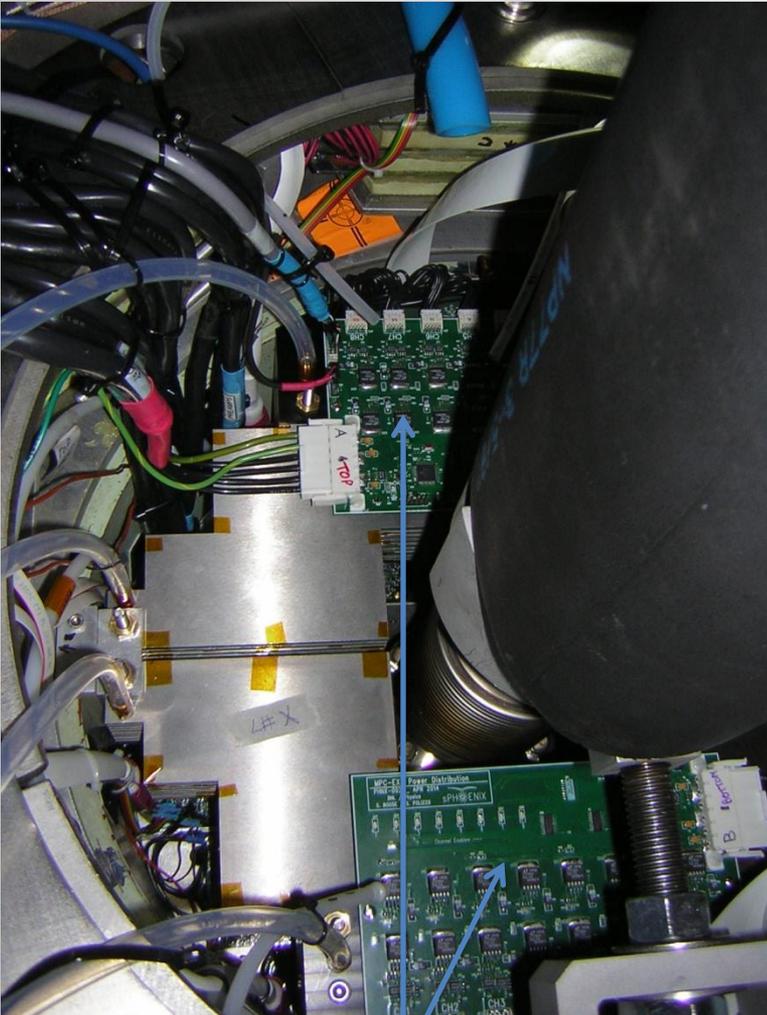
2) Low Voltage (LV) turned ON: all (40) ladders responded properly to low voltage (all working).

3) Bias voltage turned ON (10 volts, to check the connections): all (40) ladders responded properly with nominal currents.

Expert Watch Mode
 Watch
 VTX-Stripixel HV Control
 All Channels On/Off: On-40 On-0
 Fri Jan 16 16:58:17 EST 2015

VTX-Stripixel WEST										VTX-Stripixel EAST									
Channel	On/Off	Demand Volt(V)	Measur. Volt(V)	Volt. Trend	Current Limit(uA)	Measur. Curr.(uA)	Curr. Trend	Status	Age	Channel	On/Off	Demand Volt(V)	Measur. Volt(V)	Volt. Trend	Current Limit(uA)	Measur. Curr.(uA)	Curr. Trend	Status	Age
B2-L0	On	10.00	9.99	Trend	300	29.2	Trend	Ok	0	B2-L8	On	10.00	10.00	Trend	300	15.6	Trend	Ok	0
B2-L1	On	10.00	9.99	Trend	300	26.8	Trend	Ok	0	B2-L9	On	10.00	10.01	Trend	500	13	Trend	Ok	0
B2-L2	On	10.00	10.00	Trend	999	26.1	Trend	Ok	0	B2-L10	On	10.00	10.01	Trend	300	16.6	Trend	Ok	0
B2-L3	On	10.00	10.02	Trend	300	15.2	Trend	Ok	0	B2-L11	On	10.00	10.01	Trend	300	17.4	Trend	Ok	0
B2-L4	On	10.00	10.00	Trend	300	30.6	Trend	Ok	0	B2-L12	On	10.00	10.00	Trend	300	16.7	Trend	Ok	0
B2-L5	On	10.00	10.00	Trend	300	31.6	Trend	Ok	0	B2-L13	On	10.00	10.00	Trend	300	14.3	Trend	Ok	0
B2-L6	On	10.00	10.01	Trend	999	25.5	Trend	Ok	0	B2-L14	On	10.00	9.99	Trend	300	13.6	Trend	Ok	0
B2-L7	On	10.00	9.99	Trend	300	22.5	Trend	Ok	0	B2-L15	On	10.00	10.02	Trend	300	14.1	Trend	Ok	0
B3-L0	On	10.00	10.01	Trend	999	33.1	Trend	Ok	0	B3-L12	On	10.00	10.00	Trend	300	17.6	Trend	Ok	0
B3-L1	On	10.00	9.98	Trend	300	27	Trend	Ok	0	B3-L13	On	10.00	10.01	Trend	999	17.2	Trend	Ok	0
B3-L2	On	10.00	10.00	Trend	300	31.6	Trend	Ok	0	B3-L14	On	10.00	10.00	Trend	999	19.4	Trend	Ok	0
B3-L3	On	10.00	10.00	Trend	300	34.6	Trend	Ok	0	B3-L15	On	10.00	9.99	Trend	999	18.8	Trend	Ok	0
B3-L4	On	10.00	10.01	Trend	300	34.7	Trend	Ok	0	B3-L16	On	10.00	9.99	Trend	300	23.3	Trend	Ok	0
B3-L5	On	10.00	9.99	Trend	300	33.5	Trend	Ok	0	B3-L17	On	10.00	10.00	Trend	300	22.1	Trend	Ok	0
B3-L6	On	10.00	10.00	Trend	300	29.8	Trend	Ok	0	B3-L18	On	10.00	10.01	Trend	300	19	Trend	Ok	0
B3-L7	On	10.00	9.99	Trend	300	34.8	Trend	Ok	0	B3-L19	On	10.00	10.00	Trend	999	12.5	Trend	Ok	0
B3-L8	On	10.00	10.00	Trend	300	32.8	Trend	Ok	0	B3-L20	On	10.00	10.00	Trend	300	21.8	Trend	Ok	0
B3-L9	On	10.00	10.00	Trend	900	24.4	Trend	Ok	0	B3-L21	On	10.00	10.01	Trend	300	21	Trend	Ok	0
B3-L10	On	10.00	9.99	Trend	300	20.1	Trend	Ok	0	B3-L22	On	10.00	10.00	Trend	300	15.1	Trend	Ok	0
B3-L11	On	10.00	10.01	Trend	300	39.2	Trend	Ok	0	B3-L23	On	10.00	9.99	Trend	999	24.8	Trend	Ok	0

MPC-EX Status



LV Distribution Boards

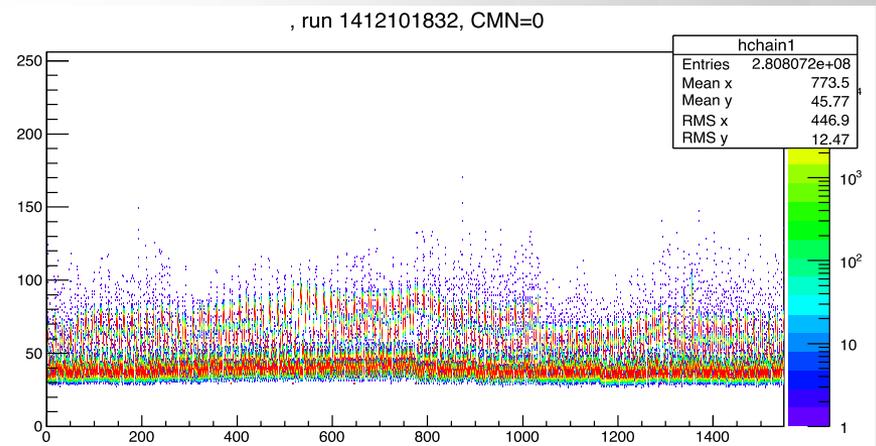
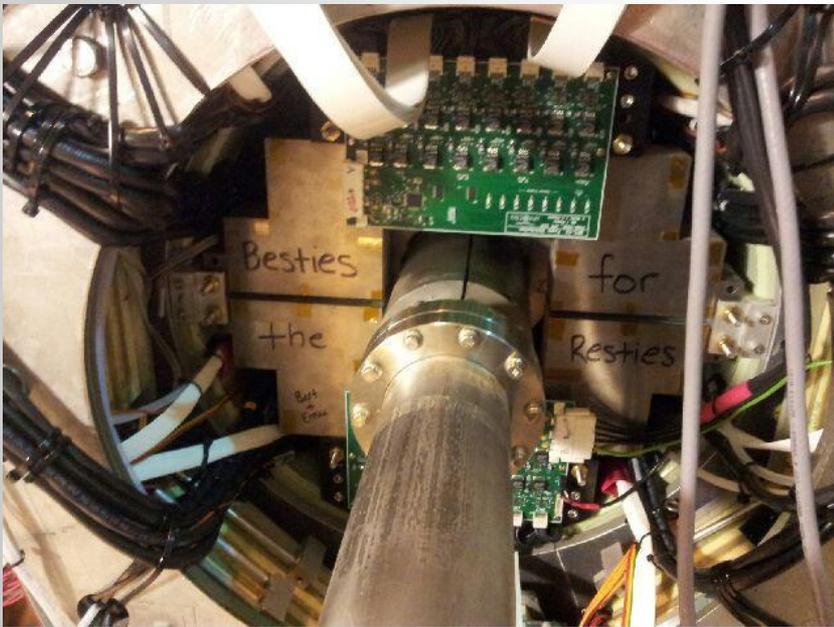
Important to control beam loss

- Both North and South MPC-EX detectors installed and cabled.
- Read real signals from silicon sensors at bias through stand-alone readout.
- Working to incorporate into PHENIX DAQ.
 - Have successfully passed data from a FEM we had set up in the counting house.
 - Have successfully cycled data from an FEM in the hall making a number of raw data files with several thousand events in each. The data files were checked with ddump by hand and by a macro that double-checked the parity words. All looked fine.
 - Working on multi-event buffering.



MPC-EX

- All hardware tested – all good
- Standalone readout with ethernet
 - Working on PHENIX DAQ integration



Spin Tasks

Task	Run 11	Run12	Run13	Run15
Local pol	Ciprian, Sanghwa	Josh/Sanghwa/Cip	Minjung Kim (SNU)	Junsang (SNU) Minjung*
Spin monitor/Oncal/CDEV	Sookhyun, Andrew, Paul, Kieran	Hide (Tokyo), John Koster	Mike Beaumier (UCR)	SeYoung, Mike*, Xiaodong
Fast production (muons + electrons)	Martin (UIUC), Yoshimitsu (RIKEN)	Mike Beaumier (Muon)	Darshana Perera(NMSU), Nils Feege(SBU)	Nils Feege, Stacy Karthas(SBU), Darshana?
EMCal Calibration (contact:Jeff Mitchell)	Andrew (SUNY)	Ciprian (SUNY)	Jeff	Jeff
Relative Luminosity	Andrew (SUNY), Kieran (RBRC)		Hari (GSU), Inseok(SNU)	Haiwan, Kieran*
Vernier Scans	Dave Kawall, Paul Kline, Oleg, Kensuke	Mike Beaumier (UCR)	Sadeera (Umass)	Katherine DeBlasio, Gregory Otino (UNM)
ERT	Kensuke	Kensuke, Chin-Hao Chen	Chin-Hao Chen, Inseok, Kieran	Inseok, Sadeera, Minjung, Yorito, Zhongling (SBU)

PHENIX
Spin
coordinator
– Itaru
Nakagawa



Shift Status

- Currently we are pretty well covered beginning with watch shifts on Jan. 13 through end of March.
- Have a few vacancies left in the shift schedule through end of March.
- Have commitments for period coordinators through mid-May.
- Are filling Subsystem Experts shifts.



Period Coordinators

Dates	Name	Comments
01/13/2015 – 01/20/2015	John Haggerty	Sheeting
01/20/2015 – 02/03/2015	Sarah Campbell	Beginning of run, MPC-EX
02/03/2015 – 02/17/2015	Darren McGlinchey	
02/17/2015 – 03/03/2015	Klaus Dehmelt	RC on travel 2/26 – 3/3
03/03/2015 – 03/17/2015	Norbert Novitzky	
03/17/2015 – 03/31/2015	Jin Huang	
03/31/2015 – 04/14/2015	Eric Mannel	
04/14/2015 – 04/28/2015	Nicole Apadula (tent)	Change to p + Au
04/28/2015 – 05/12/2015	Hubert van Hecke	RC on travel end of April
05/12/2015 – 05/26/2015		
05/26/2015 – 06/09/2015		Change to p + Al
06/09/2015 – 06/23/2015		



Summary

- We are quickly coming to a ready state.
- Still plan to be ready to take physics data Feb. 9.

