Run24 Status

RIKEN/RBRC Itaru Nakagawa

RHIC Schedule (Week 2: April 22nd-28th)

Monday (4/22)

- Crvo: (pending permit) access for LOTO/work
- Ops/PPG (day): investigate blue injection kicker
- PSG: RHIC access (yellow correctors),
 diagnose blue main quad ps
- PSG/Cryo: lead flow test in yellow
 - Power supplies ramped IR by IR
- Ops (evening, overnight): blue and yellow injection setup

Tuesday (4/23)

- Cryo: continue diagnosis sPHENIX; CeC and LEReC cooldown
- PSG: diagnose blue main quad ps
 - Access only as necessary

 Ops (evening, overnight): yellow injection setup

Wednesday (4/24)

- Cryo: work complete begin sPHENIX cooldown
- PSG: diagnose blue main quad ps
 - Access only as necessary
- Ops (overnight): injection setup or ramp setup

Thursday (4/25)

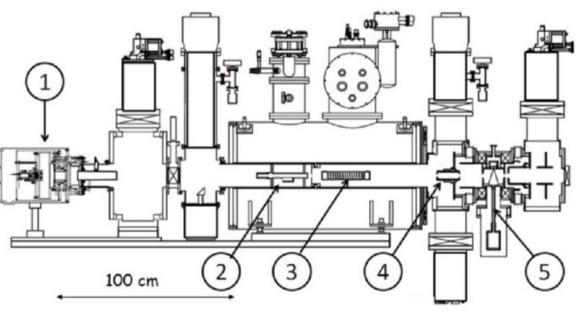
- Cryo: sPHENIX cooldown
- PSG: diagnose blue main quad ps
 - Access only as necessary
- Ops (overnight): injection setup or ramp setup

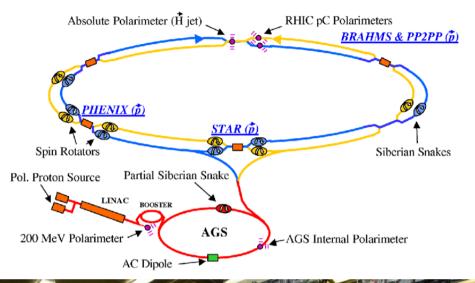


OPPIS

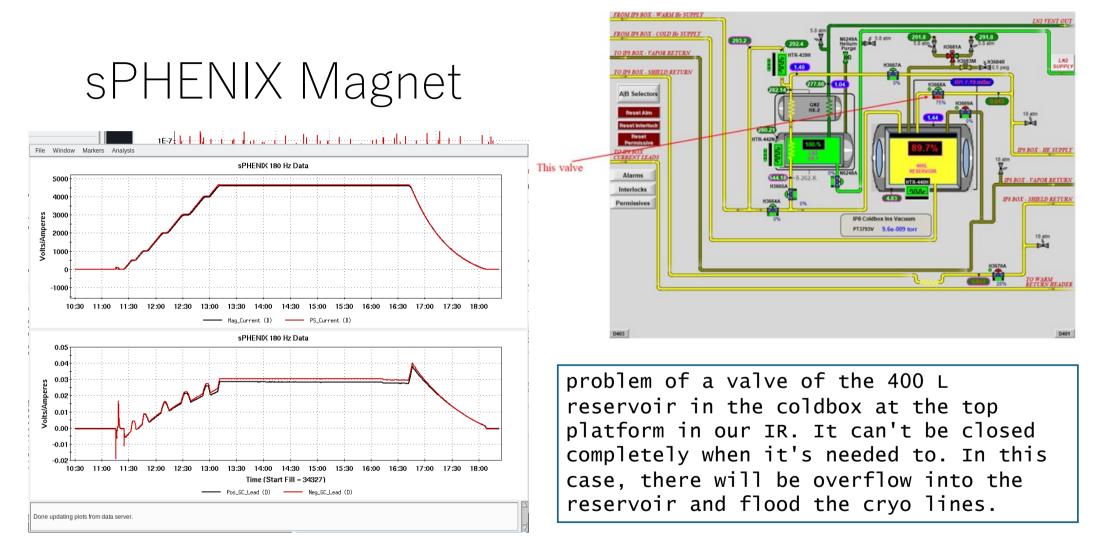
Optically-Pumped Polarized Ion Source

- Anatoli Zelenski retired.
- Having a problem in sparking at helium source
- No spare grid wires (made in Novosibirsk).









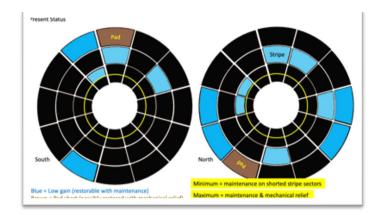
1st attempt to ramp up the sPHENIX magnet last Thursday. To be resumed this week.

TPC

۲ [mm]

(ADC-Pedestal) > (5o||20ADC) North Side, UNWEIGHTED

The major repair work seem to be successful. The dead region became smaller drastically.



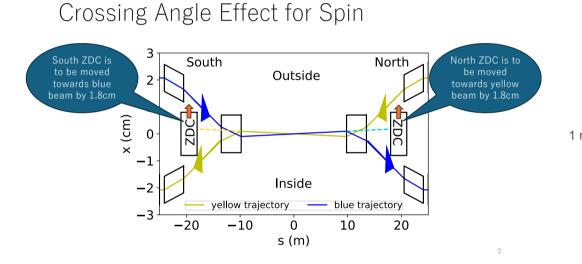
TPCMONDRAW ADC-Pedestal>(5sigma||20ADC), UNWEIGHTED, Run 40226, Time: Sun Apr 21 15:28:45 2024 800 450 ۲ [mm] 800₁ 350 400 600 600 300 350 400 400 -25(-300 200 200 25(200 n 200 150 -200 -200 15(100 -400 -400 100 50 -600 -600 500 -800 -800 -80Q 0 0 600 800 200 400 600 800 -200 -600 -200 200 400 -600 -400 0 -400 0 -800 X [mm] -X [mm] Latest online monitor

(ADC-Pedestal) > (5o||20ADC) South Side, UNWEIGHTED

Slide from TPC repair plan 2023/9/9

Readiness for Spin

Moving the ZDC to zero degrees



Used "snap gauges" to locate the ZDC's closer to one "pants leg" than the other followed up by survey (still being digested)

0° -1 mr -

2024-04-11

Spin Tasks Present Status at a Glance

Item		Hardware/Firmware	Testing	Software		
	North	 Module Installation ✓ Cabling ✓ Channel Mapping/Labeling ✓ 	 Run23 beam data ✓ Half of SMD OK ✓ Scope Check ✓ Cosmic rcdaq 	Online monitorOffline asymmetry analysis		
SMD	South	 Module Installation ✓ Cabling ✓ Channel Mapping/Labeling ✓ 	 Scope Check ✓ Cosmic rcdaq 	code		
	Scaler	 ADC digitizer/LL1/GL1p Firmware + decorder 		LocalPol Online monitor to be developed using Run23 data		
Veto		 Power Supply Installation √ Cabling √ Differential Module √ Channel Mapping √ 	 ₈Signal Check ✓ 	Online monitorOffline analysis code		
Relative Luminosity		 GL1p firmware (version 57 by Joe) 	 Testing by Martin Testing by Cold- QCD group. Need to get familiar 	Spin online monitor to be developed with test data		
Spin Pattern Recording				http-based delivery from CAD and saved in the spin database (Used to be broad casted via V124)		
Vernier Scan (the scan at 2m		GL1p firmware		Analysis code development using PHENIX data?		

Software Tasks

	Run24 Spin Software Task List ファイル 編集 表示 挿入 表示形式					· 🗈 ć	3			
-	ファイル	編集	表示	挿入	表示形式	データ	ツール	拡張機能	ヘルプ	

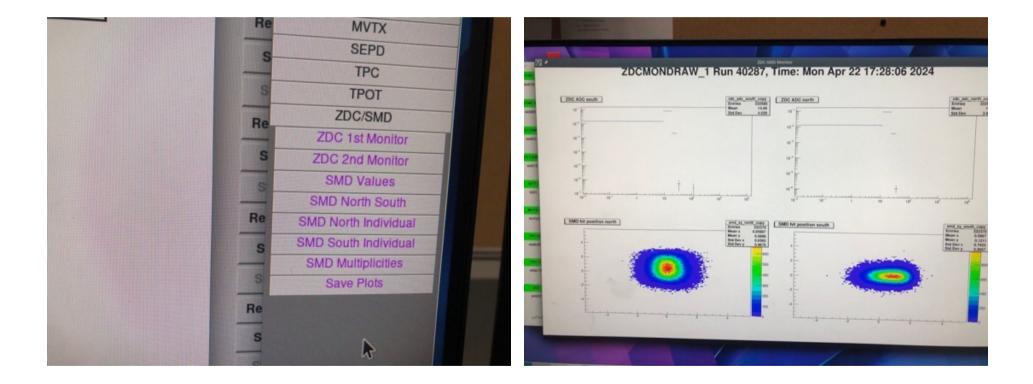


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A1 💌 🏂 Task

	A	В	с	D	E	F	G	н
1	Task	subtask	Person in Charge	Where to start	Available Data	Misc		
2	SMD/Veto Online Monitor		Ejiro (BNL), Manuel Garcia (Michigan)	sPHENIX ZDC Online Monitor	Run# 28653 (Run23)			
3	Spin Monitor		Devon (Michigan)	PHENIX Spin Monitor				
4		Spin/Fill Pattern		html protocol		work with Martin (BNL)		
5		CNI Polarization		html protocol				
6		GL1p						
7		Regular data	Athira, Greg (UIUC)					
8	Local Polarimeter (Online)	Scaler	Vincent		Fake data?	Need GL1 Scaler working		
9	Local Polarimeter (Ofline)		Athira, Greg (UIUC)	PHENIX Offline Analysis Code	Run# 28653 (Run23)			
10	XingShift (Calibration)		Devon (Michigan)	Old phenix version can be modified for new html spin info /online/calibration/onlcal/subsys				
11	Vanier Scan				PHENIX data?	Need BBC/ZDC GL1 Scaler Working?		
12								

SMD Online Monitor



Summary

- The RHIC preparation is behind the schedule by a couple of days.
- The first collision is expected this Friday to weekend.
- sPHENIX magnet is planned to be back in operation this week.
- Subdetectors are in big partition for regular cosmic data taking except for a few subsystems.
- All hardware jobs are done for spin. Various monitors are developed and getting ready for debugging with beam data.