

Run24 Status

RIKEN/RBRC

Itaru Nakagawa

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

Monday (4/22)

- Cryo: (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

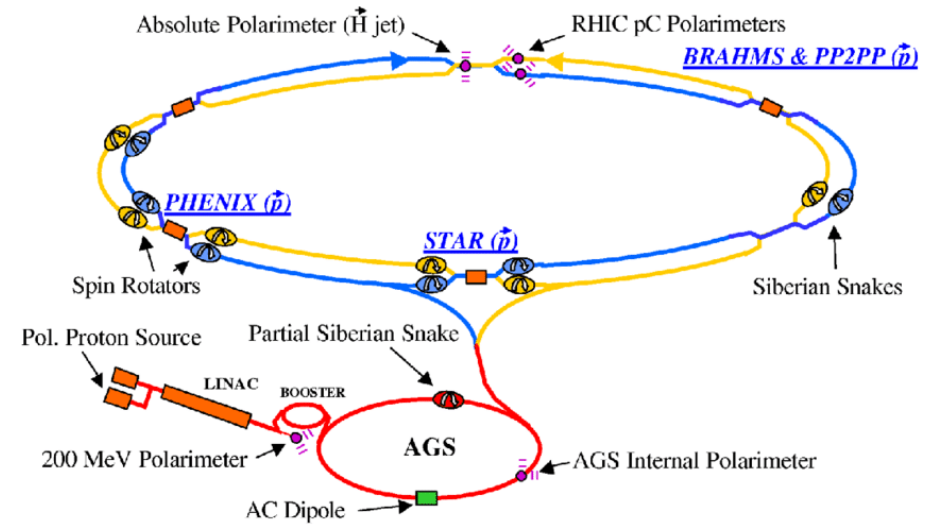
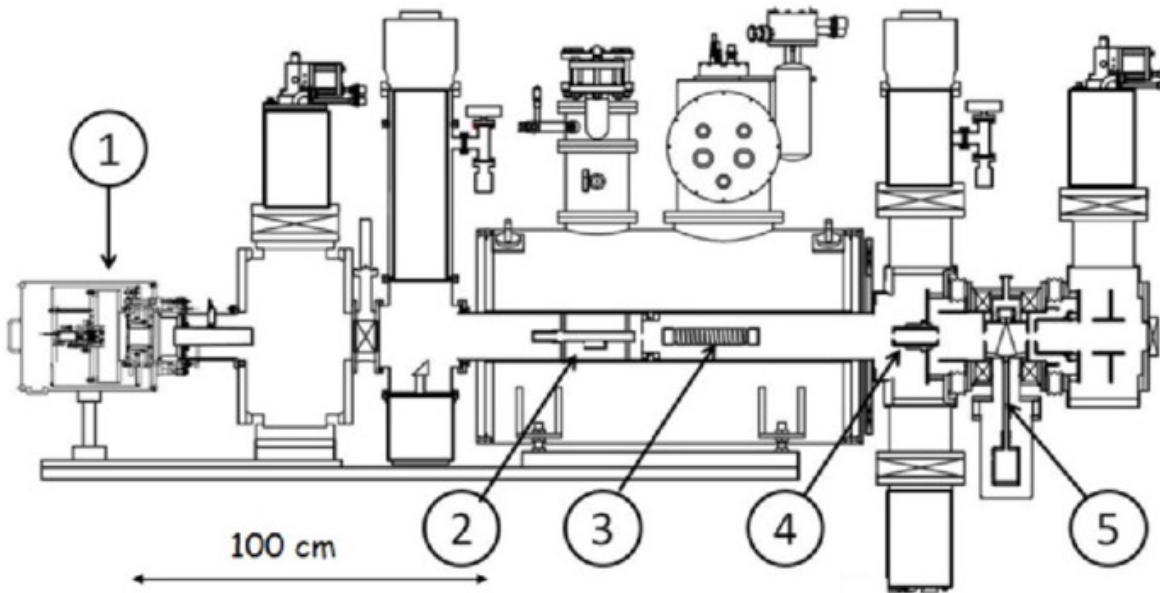
Thursday (4/25)

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

OPPIS

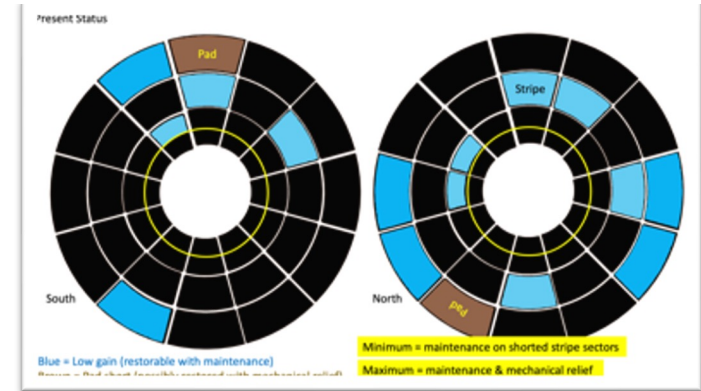
Optically-Pumped Polarized Ion Source

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



TPC

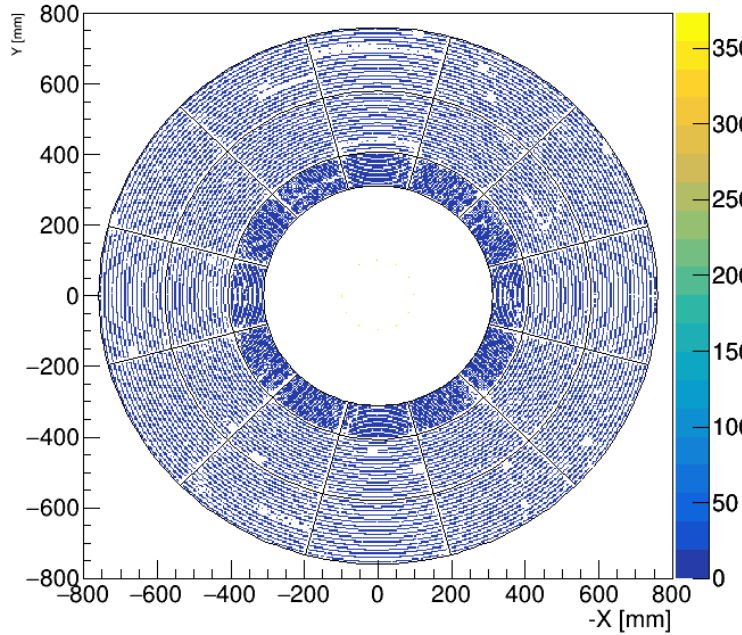
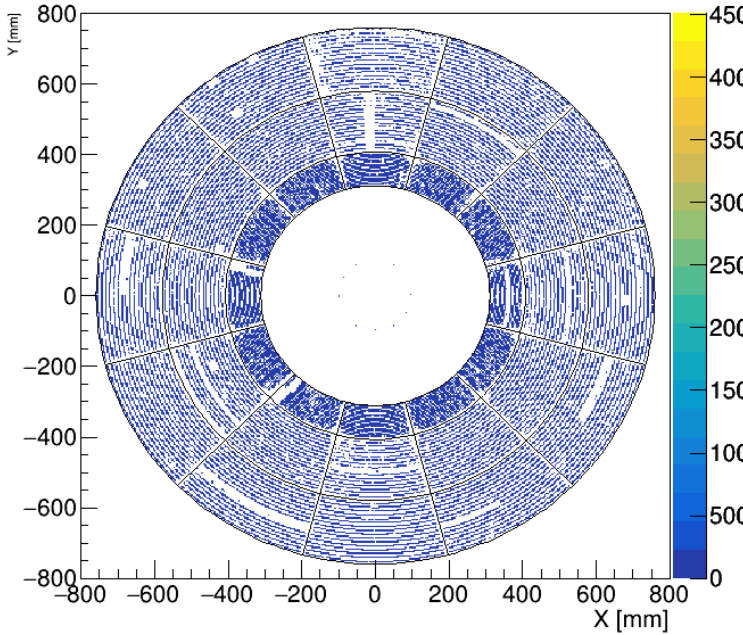
The major repair work seem to be successful. The dead region became smaller drastically.



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

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

TPCMONDRAW_ADC-Pedestal>(5sigma||20ADC), UNWEIGHTED, Run 40226, Time: Sun Apr 21 15:28:45 2024



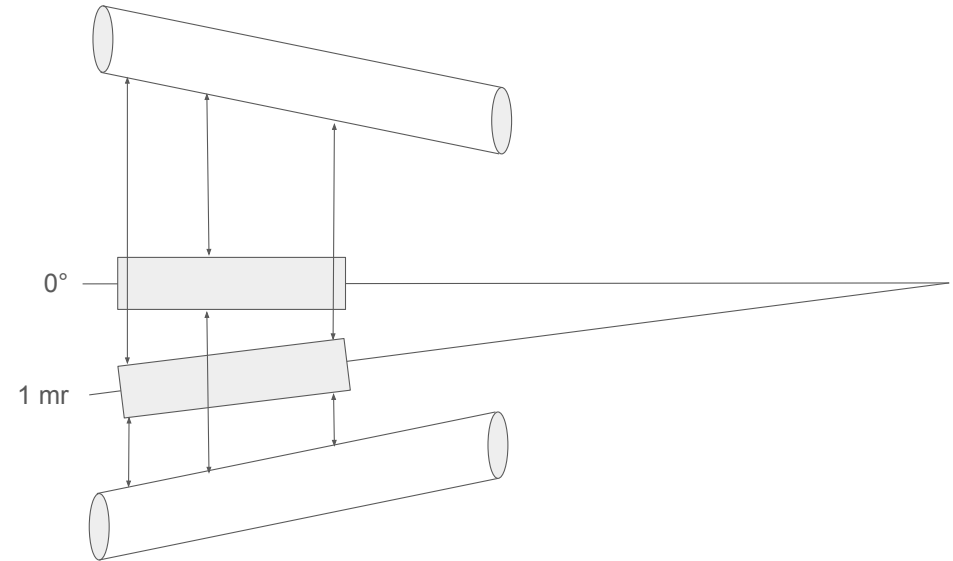
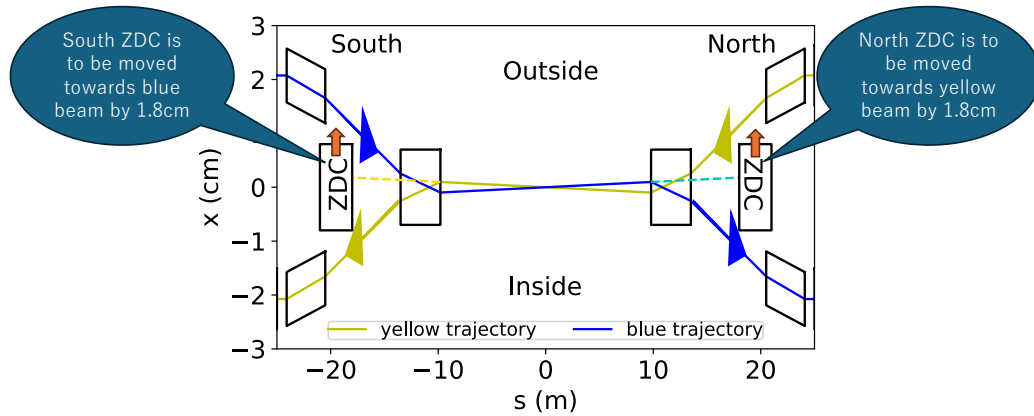
Latest online monitor

Slide from TPC repair plan 2023/9/9

Readiness for Spin

Moving the ZDC to zero degrees

Crossing Angle Effect for Spin



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

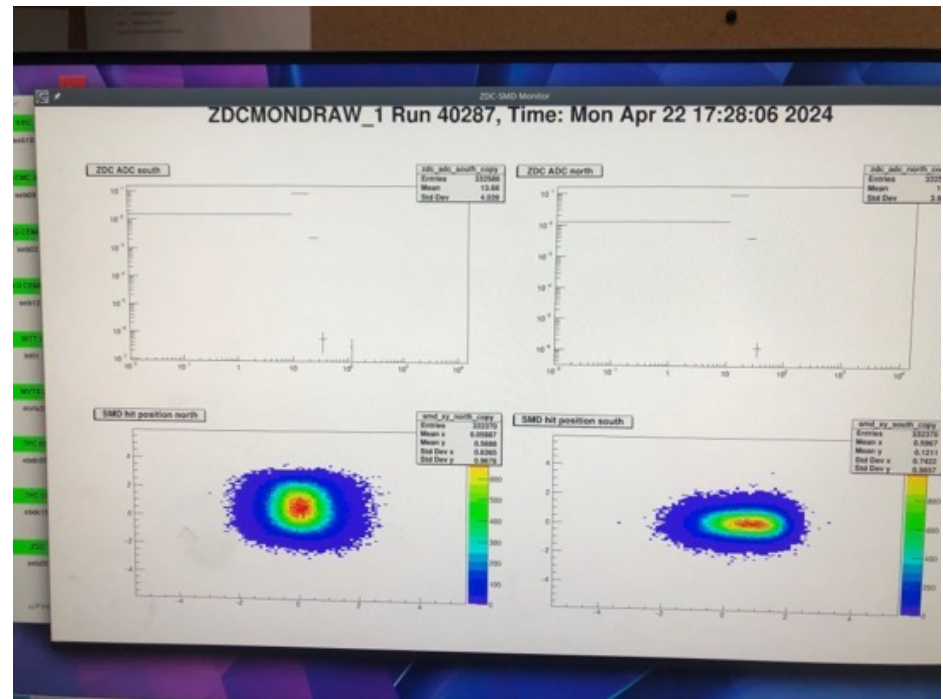
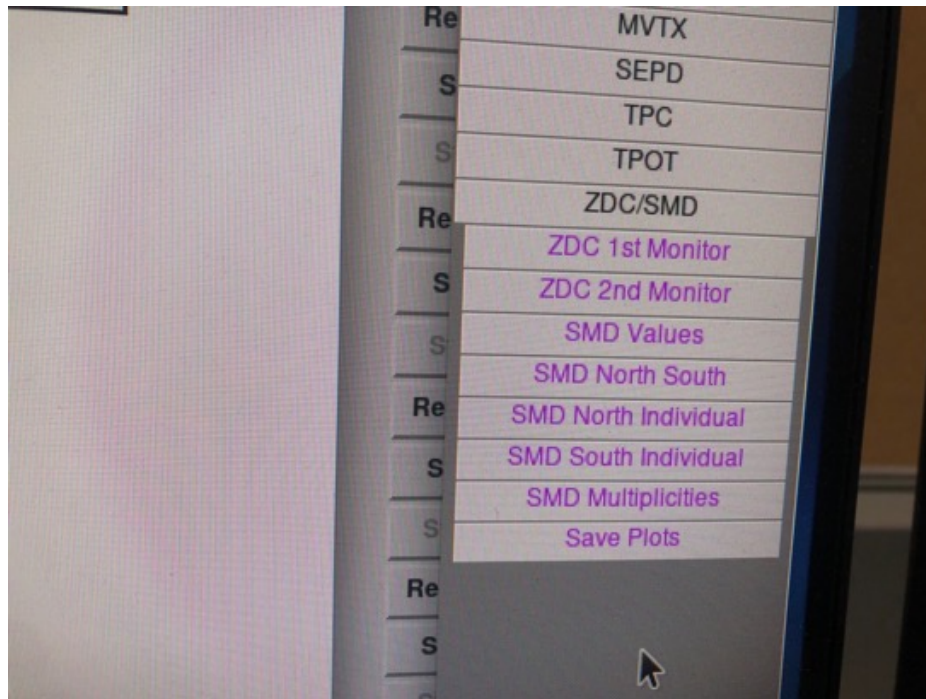
2024-04-11



Spin Tasks Present Status at a Glance

Item		Hardware/Firmware	Testing	Software
SMD	North	<ul style="list-style-type: none"> Module Installation ✓ Cabling ✓ Channel Mapping/Labeling ✓ 	<ul style="list-style-type: none"> Run23 beam data ✓ Half of SMD OK ✓ Scope Check ✓ Cosmic redaq 	<ul style="list-style-type: none"> Online monitor Offline asymmetry analysis code
	South	<ul style="list-style-type: none"> Module Installation ✓ Cabling ✓ Channel Mapping/Labeling ✓ 	<ul style="list-style-type: none"> Scope Check ✓ Cosmic redaq 	
	Scaler	ADC digitizer/LL1/GL1p Firmware + decoder		LocalPol Online monitor to be developed using Run23 data
Veto		<ul style="list-style-type: none"> Power Supply Installation ✓ Cabling ✓ Differential Module ✓ Channel Mapping ✓ 	<ul style="list-style-type: none"> Signal Check ✓ 	<ul style="list-style-type: none"> Online monitor Offline analysis code
Relative Luminosity		<ul style="list-style-type: none"> GL1p firmware (version 57 by Joe) 	<ul style="list-style-type: none"> 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 (1 st attempt of the scan at 2mrad crossing)		<ul style="list-style-type: none"> GL1p firmware 		Analysis code development using PHENIX data?

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.