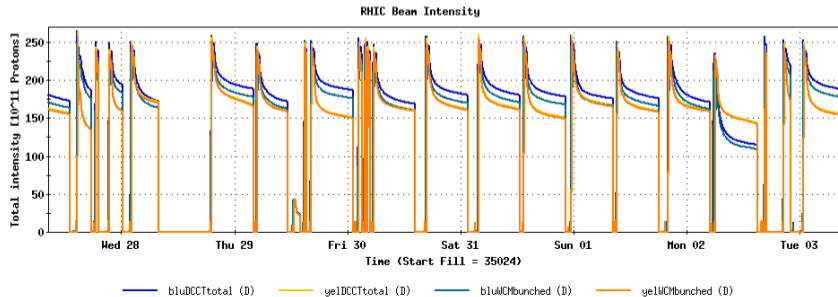
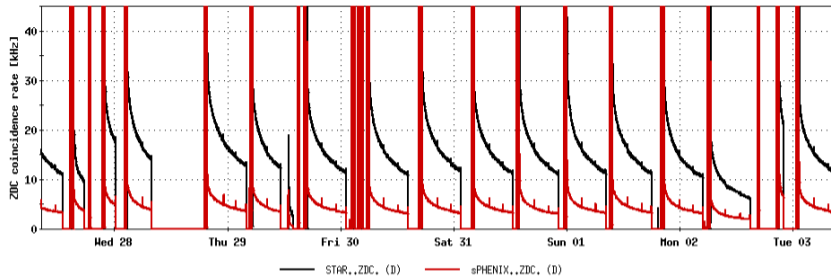


RHIC Status

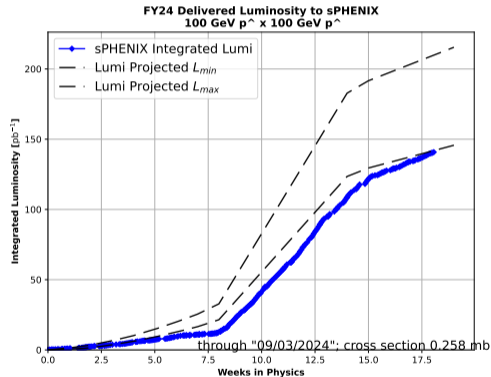
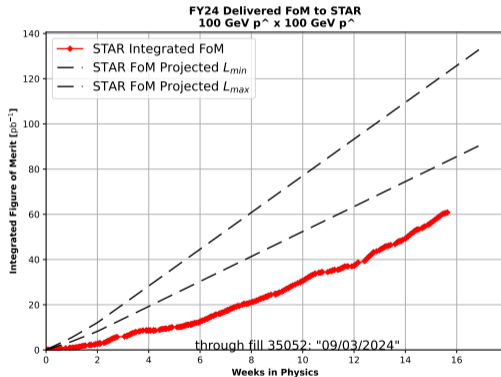
Kiel Hock

Last Week at RHIC



RHIC status and Lumi Projections

111x111 physics running since 4/30. Preliminary luminosity accounting



Inflection for sPHENIX projections coincides with change in crossing angle.

RHIC Status

Physics running with up to 2.3×10^{11} /bunch at physics and 55% polarization.

Several trips of the STAR magnet, repaired

Maintenance day last week. APEX this week.

sPHENIX PLC failure required script to be relaunched.

4a-bsyn ongoing issues which cause issues with BPM FECs. Still be investigated.

MD Thursday showed insufficient DA to squeeze both IRs.

PASS sector 8 A=B error still being investigated.

Blue injection kicker mod 1 reservoir voltage increased 74 mV to correct a drift.

Two week extension official

Key dates

April 15, 2024 through September 30, 2024

September 30, 2024 through October 21, 2024

October 21, 2024

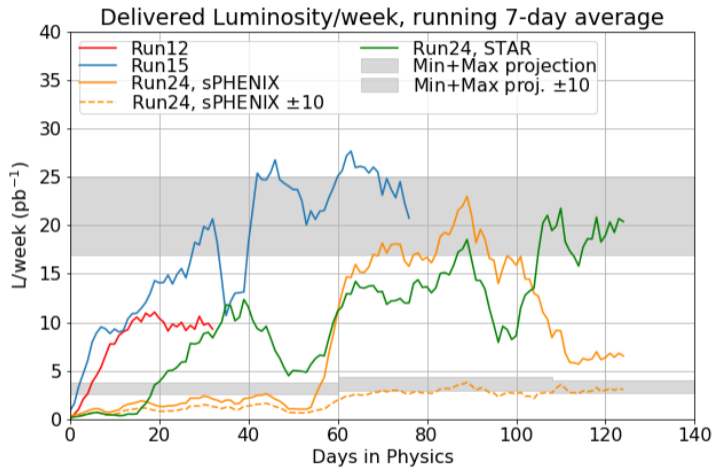
Event

RHIC polarized proton operations

RHIC Au operations

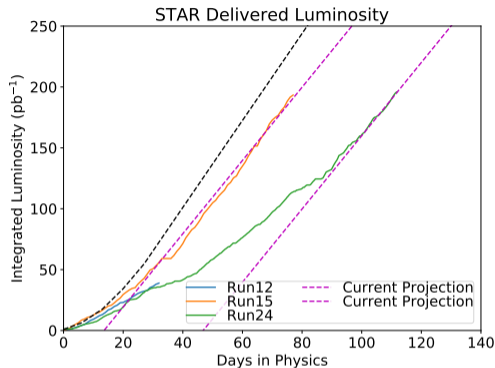
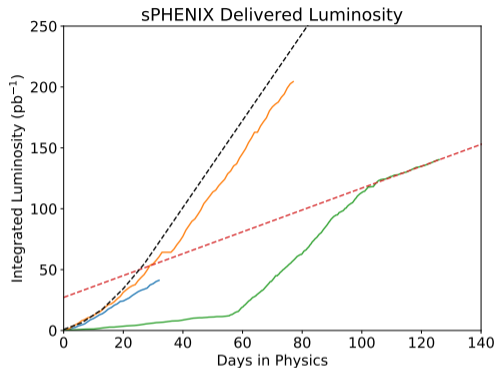
End of RHIC Run24

RHIC Performance



Both STAR and sPHENIX are within the minimum and maximum projected window.

RHIC Performance II



STAR projections currently on trend with Run15, $22.6 \text{ pb}^{-1}/\text{week}$

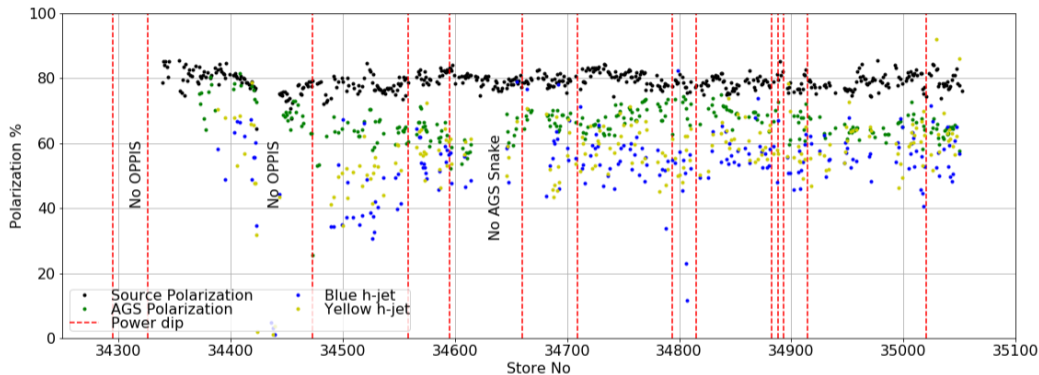
sPHENIX projections are currently at $6.7 \text{ pb}^{-1}/\text{week}$ which is $3.4 \text{ pb}^{-1}/\text{week}$ within 10 cm

Based on current projections by 9/30:

STAR will have 283 pb^{-1} delivered luminosity and 80 pb^{-1} FOM.

sPHENIX will have 166 pb^{-1} delivered luminosity and 50 pb^{-1} within 10 cm.

Polarization Performance



CNI	Full Run	Last 150	Last 14	h-jet	Full Run	Last 150	Last 14
blue	53.2	52.4	51.3	-	52.3	56.5	56.6
yellow	55.8	52.9	54.8	-	56.8	60.6	60.8

h-jet values from: <https://www.cnipol.bnl.gov/hjet/run24.html>

cni values from: <https://www.cnipol.bnl.gov/fills/?rp=24&fn=&ft=&be=100&mode=11&sb>Select>

Au Startup Schedule, tentative

Day(s)	Objective
1	Maintenance followed by DX training + RF conditioning
2	RF conditioning overnight, injection setup during the day
3	ramp and store development, possibly more RF conditioning if we cannot hand
4	finish setup and hand store over for experimenter setup
5-8	ramp up and start setting up stochastic cooling 1 plane/store
7+	week of, look to setup 56 MHz

Start date tentatively 9/30.