

# RHIC Run24 Preparations

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# RHIC Startup Schedule

April 15 16 17 18 19 20 21 22 23 24 25 26

Blue 4k Wave

Yellow 4k Wave

He lead flow tests\*

PS testing\*

Injection checks

Blue Injection

Yellow Injection

Ramp setup

Rebucketing setup

Rotator ramps& store setup

Ramp-up

Physics

\* optimistic duration for testing given number of changes. Having an additional meeting this Friday to try and optimize the schedule.

# RHIC Startup Status

- Blue 4k wave started
- Blue PS testing started
- Blue helium lead flow tests started
- Blue 4k wave completed
- Blue helium lead flow tests completed (Okay to ramp blue)
- Blue PS testing completed (Hysteresis complete)
- Injection checks
- Injection into Blue
  - Capture
  - Instrumentation setup
  - Feedback setup
  - Polarimeter targets conditioned
- Blue setup complete
- Yellow 4k wave started
- Yellow PS testing started
- Yellow helium lead flow tests started
- Yellow 4k wave completed
- Yellow helium lead flow tests complete (okay to ramp B&Y)
- Yellow PS testing complete (Full hysteresis complete)
- Injection into Yellow
  - Capture
  - Instrumentation setup
  - Feedback setup
  - Polarimeter targets conditioned
- Yellow setup
- Ramp setup complete
- Rebucketing setup complete
- Rotator ramps& store setup
  - instrumentation setup
  - collisions setup
  - collimation setup
  - polarimetry setup
  - abort kicker optimized
- Experimenter Setup& ramp up
- Physics, setup complete

# Physics Milestones

- $\beta$  squeeze at IP8
- 1.0e11 protons per bunch @physics
- complete low-luminosity run for STAR
- sPHENIX running with nominal store conditions
- 1.7e11 protons per bunch @physics (Run12 maximum)
- 2.0e11 protons per bunch @physics
- 2.4e11 protons per bunch @physics (Run15 maximum)
- switch to alternate AGS setup
- 2.5e11 protons per bunch @physics
- 3.0e11 protons per bunch @physics

# Injector Tracker

## Injector Performance

OPPIS polarization is currently 10% below nominal

AGS Polarization is at 60% with  $2e11$  protons as a result, a reduction in polarization to reduction at OPPIS.

OPPIS personnel suspect a magnetic field issue with the SC solenoid, trim magnet PS expected this week.

## Skew quad commissioning status

All magnets have been installed and verified.

Commissioning ongoing outside of optimizing normal setup.