

RHIC Run24 Preparations

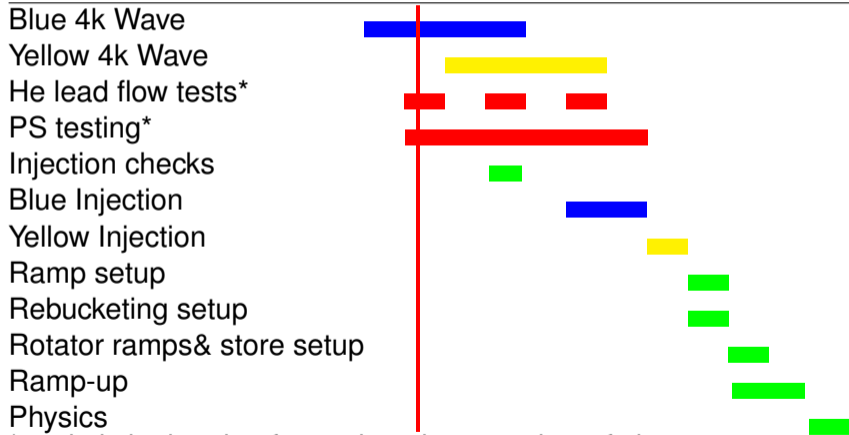
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RHIC Startup Schedule

Aggressive StartUp Schedule

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



* optimistic duration for testing given number of changes.

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

Injector Tracker

Injector Performance

OPPIS polarization nominal following weekends maintenance

AGS Polarization is at 76% with $1.4e11$ protons with standard JQ setup, tuning for stability and intensity

Two LINAC bunch+Merge setup with snakes, needs more time to study

Booster bunch split+AGS merge setup with snakes.

Skew quad commissioning status

All magnets have been installed and verified.

Commissioning ongoing outside of optimizing normal setup.

Physics Checkpoints

β 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