

RHIC Run24 Preparations

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RHIC Coordination Meeting
December 5, 2023

Overview of Major Works, updates

RHIC start date still expected to be no earlier than March 3, 2024.

Valve box and DX repair

- | DX expected to be reinstalled mid December

Blue snake reinstall

- | Readiness expected to be confirmed this week.

Diode removal and testing. New diode installed and hi-pot successful.

RHIC ASE update process underway.

- | Although scrubbing does not require the ASE change, the visual and audible ODH alarms in 1008B must be in place.
- | Scrub still expected to start early January.

All AGS skew quad magnets have been received. First PS expected this week.

RHIC Run Preparations

Lattice development is underway with zero DX shifts (GRD).

- | Preliminary design has $\beta^*=50$ cm.
- | Luminosity expectations with this lattice communicated to sPHENIX.
- | -2 mrad crossing angle needed to maximize clearance through the DX aperture. This will require the polarity of the D0 shunt supply to be reversed.

Beam-beam effects with crossing angle simulations (X. Gu and Y. Luo).

- | Preliminary results show significant tune shift suppression from crossing angles.

Dynamic aperture simulations with crossing angle simulations (X. Gu and Y. Luo).