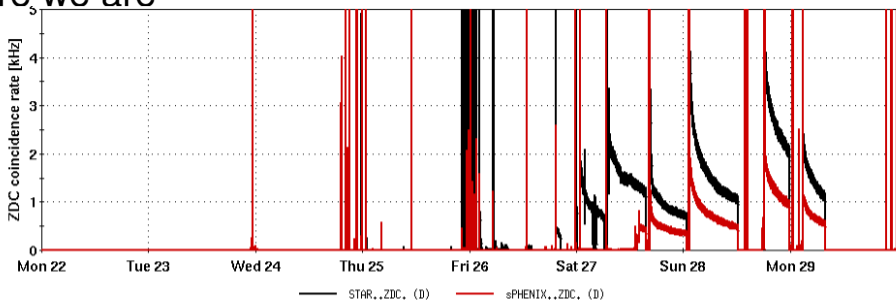


RHIC Status

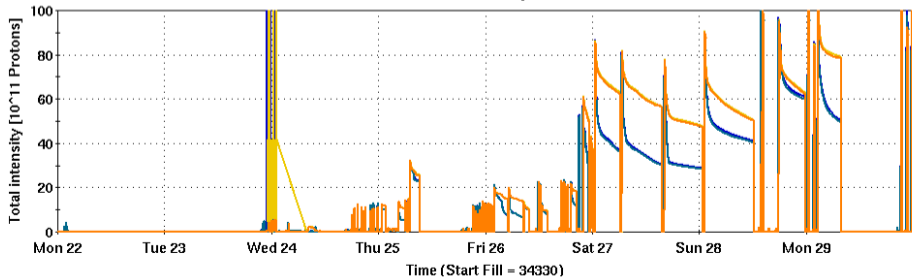
Kiel Hock

April 30, 2024

Where we are



RHIC Beam Intensity



Where we have been

- RHIC main magnet PS released for setup on April 23
- Setup of blue and yellow on-hysteresis on April 24
- Aperture scan at sPHENIX beampipe confirmed location
- All polarimeter targets conditioned
- 56 MHz conditioned
- Rebucketing and 12x12 stores on April 26
- 56x56 April 27-28
 - Reduced sPHENIX crossing angle from -2 mrad to -1 mrad
- 111x111 established on April 29.
 - 1 mrad crossing angle implemented at STAR for their low luminosity run

Where we are going

Machine development Tuesday to:

- return to blue bare orbit without correction to get away from bad state
- improve blue lifetime
- implement Run15 10 Hz matrices for energy ramp
- implement β^* squeeze to 60 cm.

Following MD and through the week:

- revisit steering at STAR for low luminosity run and try to reduce backgrounds
- advance intensity with 111x111 bunches
- physics running all week

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