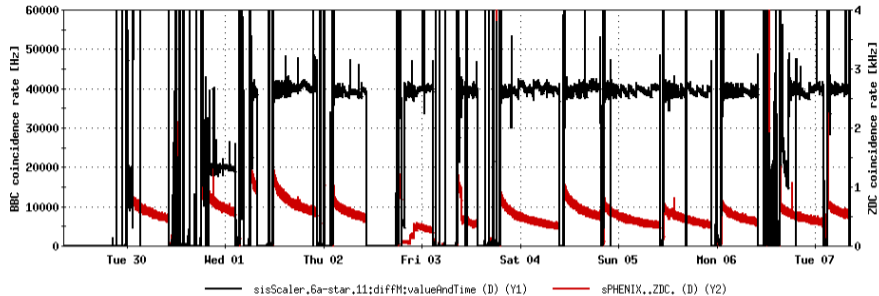


RHIC Status

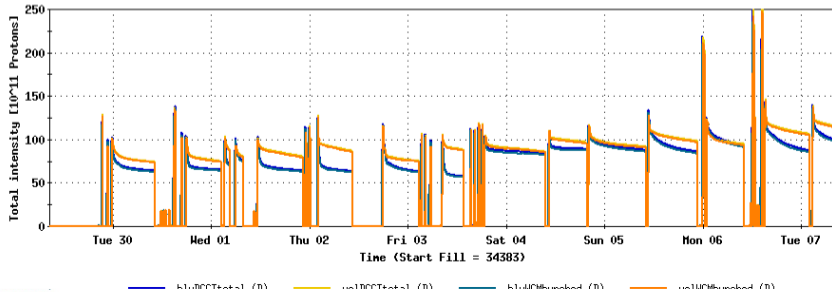
Kiel Hock

May 7, 2024

Last Week at RHIC



RHIC Beam Intensity

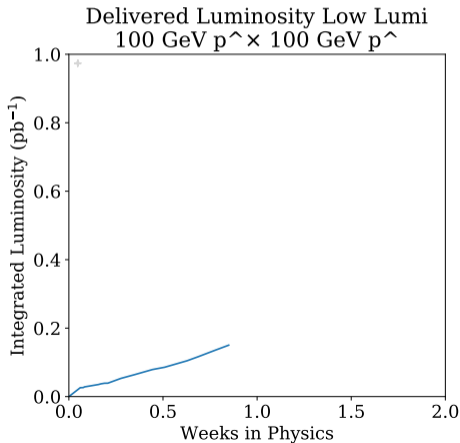
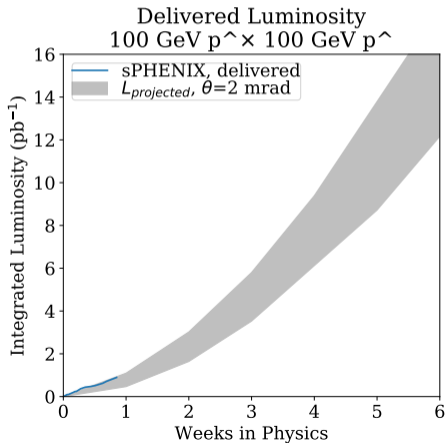


RHIC Status and Lumi Projections

→ 111x111 physics running since Tuesday.

→ 1 mrad crossing angle implemented at STAR for their low luminosity run

Preliminary luminosity accounting



RHIC Status

MD Thursday for optimizing β^* squeeze at IP8, 2 hours.

MD Thursday for optimizing vacuum scrubbing, 4 hours

- further optimize injection efficiency of blue with larger beam
- setup capture into 28 MHz RF
- develop routine to optimize the use of time

Having more regular store lengths on the shorter side (preferably 2-4 hours, no more than 8 hours) will further improve vacuum conditions.

MD next week for setup and optimization of rotator ramp (after 5/15).

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