Run Plan: Run 12

Energy change 100 GeV to 250 GeV

Ramp Audit

- Required ramps are created and audited:
  - pp12b-v1: Energy ramp to 255 GeV, zero crossing angle at IR6 and IR8 only
  - pp12b-rot0: Ten second removal of separation bumps, no rotator ramps
  - pp12b-rot1: Rotator ramp to longitudinal polarization at both STAR and PHENIX
- Matrices created for:
  - Ramp and store slow orbit feedback
  - 10 Hz orbit feedback
- FeedbackEditor tune and orbit targets all properly set
  - Tune feedback nominal tunes and min, max of tune window are set
- Energy ramp::last and storage ramp::first are properly matched (e.g. DX currents)
- Sequencer items dependent on ramp length are changed:
  - Cogging times are set properly
  - Ramp chrom measurement parameters are changed appropriately
- Check that loss monitor events will be issued in appropriate order (Brho triggered BLM events triggered properly relative to other BLM events, like ev-blm-rot and ev-blm-store)

Ramp Setup

Injection is identical to 100 GeV polarized protons, no setup needed.

Day 1 (day, eve, owl)

- 2-3 hours power supply setup: ramps and high current shutoff
- Ramp 12 bunches, 1e11 through energy ramp. Go through rot0 if all has gone well.
  - Did we do the energy ramp at near 2/3 on the first attempt last run or start far away and inch in?
- Once low bunch ramp established, adjust tune away from 2/3 and do chrom measurement. Adjust for gross problems, paying particular attention to large chroms during the near 2/3 portion of the ramp.
- Raise bunch number directly to 56 if transmission is nominal (~99%)
- Continue to raise bunch number 12->56->84->109 bunches, raise bunch intensity as time and tolerance allows.

Day 2

Day shift

- Rebucketing setup

- Rebucket 6 bunches, fix post-rebucket lifetime, repeat until rebucketing operational and post-rebucket lifetime good. Energy ramp only during this time. Increase bunch number in coordination with RF group and in proportion to confidence of success.

Eve shift

- Rotator ramp development
  - **Before turning on rotators OC must enable rotator quench permits (permit modules 5c-ps3,7a-ps3, 7c-ps3, 9a-ps3). Mei must be contacted to insure proper configuration of loss monitors**
  - Establish low bunch ramp at high efficiency through rotator ramp
  - Measure chrom on rotator ramp (may want to skip rebucketing for this)
  - Increase bunch number as before.
  - Raise bunch intensity

Owl shift

- One full store at transverse polarization (rot0). 56 bunches, minimal tuning for lifetime and collisions.

Day 3

Day Shift

- Finish rotator ramp development, increase intensity

Eve Shift (and onward)

- Transition to longitudinal collisions for experiments
- Use first longitudinal store to tune for polarization direction