Timeline

- March 1: AGS pp setup
- March 23:
  - end of Cu run and beginning of pp run
- March 23 - March 24
  - Jet installation
  - CNI pol target&detector installation
  - AGS cold snake installation
- March 25 – April 1
  - Machine setup
- April 1 – April 15
  - Ramp up
- April 16 – June 19
  - Physics run

Machine Configuration for pp physics

- Energy
  - Injection: 46.5
  - Store: 191.5
- Working point
  - Ramp: 28.72, 29.73
  - Store: 28.68, 29.69
- Lattice: IP 6 8 10 12 2 4
  - Injection: 10 10 10 10 10 10
  - Store: 1 1 10 5 3 10
- Collision Pt: IP 6 8 2
- RF:
  - No rebucketing at store

Machine Configuration for pp to 170 GeV

- Energy
  - Injection: 46.5
  - Store: 325.5
- Working point
  - Ramp: 28.72, 29.73
  - Store: 28.68, 29.69
- Lattice: IP 6 8 10 12 2 4
  - Injection: 10 10 10 10 10 10
  - Store: 1 1 10 5 3 10
- Collision pt: 6 8
- RF:
  - No rebucketing at store

Machine Configuration for pp to 217 GeV

- Energy
  - Injection: 46.5
  - Store: 414.5
- Working point
  - Ramp: 28.72, 29.73
  - Store: 28.68, 29.69
- Lattice: IP 6 8 10 12 2 4
  - Injection: 10 10 10 10 10 10
  - Store: 0.85 0.85 10 5 3 10
- Collision Pt: 6 8
- RF:
  - No rebucketing at store

Acceleration beyond 100 GeV

- Goal
  - To evaluate the spin dynamics beyond 100 GeV
    - What's the impact of 1mm rms orbit distortion(achieved) on the polarization transmission efficiency?
    - How much can we correct the orbit with the existing RHIC orbit correction system at higher energy?
  - To provide a guidance/justification for the full ring re-alignment of RHIC during summer of 2005
- Expection
  - Little or no polarization is expected at energy of 217 GeV with 1mm orbit distortion
  - Polarization ramp measurement will be the key technique in exploring the depolarization mechanisms and locations.

Acceleration beyond 100 GeV

- Plan
  - Simulation
    - Spin tracking with ~1mm rms orbit distortion
    - Spin tracking with different orbit distortions to evaluate the tolerance of orbit distortions.
  - With beam
    - Develop the ramp to 170 GeV(10m – 2m from inj to 100GeV

      And remain 2m upto the top)
      - Measure the polarization/orbit distortion along the ramp
      - Vary the orbit distortion around 135 GeV where the strong intrinsic resonance is located
    - Develop the ramp to 217 GeV
      - Measure the polarization/orbit distortion along the ramp

Challenge of going beyond 100 GeV