FY13 PP Run Status

- Dry Run Results
- Ramp Development
- Strategies for Polarization Optimization:

Dry Run Results:

- We had 100 systems to test
 - 37 are either in progress, failed or delayed
 - Three categories:
 - System failed or had problems and work is currently being done to fix it (i.e. AGS orbit response GPM's)
 - Related to RF commissioning work on going
 - Related or depended on Ramp development

Ramp Development

- Wiggles in power supply were an issue:
 - Re-fit Blue to smooth out wiggles
 - Keep Intrinsic resonance < 0.42



 Remove big wiggles and reduced phase shifter power supplies < 140 Amps





Intrinsic Res kept < 0.42



Strategies for Polarization

- First make sure Ramp has lowest Intrinsic Resonance structure
- Drive tune and control Chroms during three strong Intrinsic Resonance Crossings
- Later bump imperfection resonances during crossings (use approach tested in APEX last year)
- Maybe Snakes.

Example of Tune sensitivity with Yellow E-lens Tracking (with uncontrolled Intrinsic Resonance)



E-lens Yellow Optics IntRes = 0.46, Imp=0.04

Things to Worry about

- These are two brand new Ramps. Blue and Yellow are different from last year and very different from each other.
 - Training and tuning quench tables may take more time especially if our currents wiggle too much or go too high.
 - Getting the beam up the ramp will mean a lot of work controlling sextupole settings to keep chromaticity under control
- RF a lot of new things which should help us. Longitudinal dampers. Landau Cavities.