

Headed: Roger Dixon

Present: Me, Jim Morgan, Ioanis K., Paul Derwent, Steve Werkema (for Keith Gollwitzer), Eric Prebys, Ron Moore, Bob Mau

- Why are we meeting?
 - Develop strategy
 - Identify issues
 - Meeting operational goals
- Issues
 - Roger taking over Dave McGinnis' duties. Will need some operational expertise.
 - Run Coordinator - tentative 1 year term.
 - Deputy Run Coordinator needs to be chosen by August 8th.
 - Thin in Pbar and MI and possibly Tevatron
 - Associate Scientist
- Performance Plots
 - Mike Martens updated the design and base curves.
 - Goal for this year is hard.
 - Would like to make the DOE curve for FY06 in the short term.
 - Problem if don't make curve, unless gaining.
 - Would need to average 20pb-1 to get to blue curve.
- **Booster**
 - Trying to optimize Linac current.
 - Goal is to get intensity up and beam quality.
 - Two issues
 - **Getting orbits.** Was a big deal since lattice changed.
 - Was finally where they wanted by about last week.
 - The problem is there is not enough corrector strength.
 - Ultimately will need magnet moves. Need to optimize aperture and accommodate the extraction region.
 - Cogging moves the beam horizontally - no hard aperture, just good field region.
 - Gamma-T jump. Have to get through middle of pulsed quads. One problem was getting them aligned better.
 - **Tuning intensity.**
 - Dampers is the current work. Coupled bunch modes after transition.
 - Bad things happening at transition. Curve determined by a number of different analog ramps, may need to tweak pots.
 - Questions from Ioanis
 - Need dampers?
 - What if Booster doesn't bunch rotate properly? Is it being maintained? Can it be improved? Need help from RF?
 - Never run with 19 stations. Reduce RF in other stations to make 19 stations work, so don't gain RF by turning on 19 stations. It is just a spare.
 - Need about 4.5×10^{12} out of Booster to get to the 8×10^{12} on target.
- **Main Injector**
 - On stores doing OK
 - Want to tune on slip stacking
 - SY120 takes a lot of time.
 - May be requests to change between 1 sec and 4 second spills in same day.
 - May be worth it to get different clock events for different spill lengths. Do we want to steal the \$20. Short on events.

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- New BPM and BLM systems coming online. There have been problems. These have higher priority.
- Waiting to get new BPMs going to do more sophisticated lattice measurements.
- Collimators to be commissioned MI-8. Should help beam losses.
- **Pbar**
 - Still trying to get back where they were.
 - Still 10-15% below where we want to be.
 - Standard is February, 2006.
 - Bottleneck - may be Debuncher to Accumulator aperture.
 - Ows - more beam on target, all production efficiencies went up? Not completely understood.
 - Also fixed broken shunt in AP2 line.
 - Suspect most of problem in D/A transfer.
 - Not doing AP2 line overthru yet, so larger spread in efficiencies.
 - \$21: Problem with getting up and running - effect of event is more than just the time in the TLG. Impact on three stacking cycles that follow.
 - To get to 25ma/hr
 - Fix AP2 line to steer beam better through it.
 - Matching AP2 line and Debuncher. Will take some studies.
 - Cooling problems?
 - ?
 - Unstacking - when speed up transfer time, have less cooling time, efficiencies less.
 - Goals
 - 25ma/hr - by end of FY06
 - 30ma/hr - by February 2007
 - Too many variables.
- **Recycler**
 - Starting to get up to intensities that approach last time. Is it ok?
 - 250e9 to 290e9
 - Explore intensities in way doing cooling.
 - Hit and miss on lifetime issues.
 - Stochastic momentum cooling not working as well?
 - Cooling for MI31 and Pelletron.
 - New SF6 skid.
 - Electronics inside of Pelletron is 50 deg C.
 - New skid did not add additional cooling.
 - Can add more building cooling. Getting all work done on the outside. Infrastructure will take time and need to turn off Pelletron.
 - Long term is to add old SF6 skid in parallel.
 - Changed thermocouple trip point.
 - Added additional dampers. Commissioned and on.
 - Stash size end of year.
 - Trying to balance between long. And transverse.
 - Can tolerate transverse that we are getting
 - Better longitudinal would help coalescing.
- **Tevatron**
 - Waiting for more Pbars to get back to pre-shutdown conditions. Verify no intensity dependent problems.
 - Luminosity lifetime
 - When did larger helix studies, non-luminous lifetime increased.
 - Emittance growth dominating lum lifetime.
 - Possible to load higher intensity protons and shaving them off.
 - Overall new helix at 150GeV has helped.
 - Proton lifetime at 150GeV is much better now.
 - B48 Vertical separator is not running correct (30KV off). Needs to be addressed, but appears not to be too big of a deal.
 - Some misc.
 - Working on new sextupole power supplies -
 - TEL2 commissioning.

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