

Notes from MI/RR Meeting - 19 Feb 2003 by Bruce Brown Notes on 25 Feb 2003

Shekhar Mishra -- Main Injector and Recycler Issues

Issues which will get attention this week are on the list shown here.

2/19/03 (Main Injector Department Meeting)

Main Injector Issues

- Coalescing efficiency for pbar (Although it is heavily dependent on pbar source).
- Beam loading compensation on the ramp
- Development of 2.5 MHz acceleration
- MI8 Line lattice function and its match to MI

Recycler Issues

- Recycler injection, aperture, operating point
- Recycler emittance growth and lifetime
- Recycler RF manipulations
- Recycler Instrumentations
- Recycler pbar injection

In addition to these immediate issues, discussions between the MI Department and the Beams Division management have begun to address operation of the Main Injector for Fixed Target running. We expect to start in a month on issues of extraction for SY120. For NuMI we are asked to provide $2.5E13$ /cycle from 5 Booster Batches. In addition to machine issues we need to document requirements for the beam permit (e.g. How to inhibit extraction of large emittance pulses?), lattices and other significant issues.

A problem has been observed with the time response of the MI Horiz IPM (non-magnetized). It is most apparent on cycles where protons are sent on round trip to/from the Recycler.

Other Reports

Martin Hu reported on RR status. We still see a tune change of 0.05 for S29 ramps. Problems with the flying wire are attributed to use of chromium plating on the carbon fiber in place of the intended gold plating. Brajesh reported that the purchase orders for 70 DDC boards for the BPM system are moving through the purchasing process.