

Notes from the 2/08/05 MI BPM Requirements Meeting
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These notes can be found in Beams docDB #1526.

1. MI BPM Requirements -- Dave Capista

- Dave described his ideas for the setup, control and use of MI BPM data. His idea is to follow the LLRF, which is pretty detailed in the states of the machine as various types of beams are injected, accelerated and extracted from the machine.
- Dave's example transparencies can be found in Beams docDB #1526, along with these notes. They cover possible BPM defaults of stacking, stacking TBT and pbars from Recycler.
- One issue that has come up is the time it takes to change the state of the Echotek + front-end from closed-orbit (narrow-band) to TBT (wide-band). This still needs to be measured and the number understood.
- There were many other questions/issues that were brought up during the discussion and these no-doubt will be topics that will need further study and clarification.

2. MI BPM Requirements - Alberto Marchionni

- Alberto presented some proposed updated requirements for the MI BPM. His slides can be found in Beams docDB #1526. He presented (and has updated in the slides) the following information:

- Energy
- RF
- Bunch structure
- Bunch length
- Intensity per bunch

for the following modes of operation:

- protons for pbar stacking and fixed target
 - protons to the Tevatron (tune-up and shots)
 - antiprotons from the Accumulator/Recycler
 - antiprotons to the Tevatron
- After Alberto's presentation (which covered only a part of the requirements) we discussed a few topics including:
- The BPMs will measure either vertical or horizontal position at each location.

- Maximum number of turns in current TeV BPM is 8192. Is that sufficient for MI BPM? Can it be increased?
- The assumption is that barrier buckets will not be used.
- A closed orbit rate of 500 Hz is the design goal.
- The TeV BPM concept of injection first turn closed orbit is something that MI BPM would like to use as well.

3. AOB

- We will meet on Tuesday, February 15 at 10:00 A.M. if Alberto and Dave are ready to continue. An announcement will be sent out Monday the 14th or Tuesday the 15th.