

Notes from the 6/14/05 MI BPM Upgrade Meeting
Stephen Wolbers
These notes can be found in Beams docDB #1526.

Brian Chase : LLRF and MI States

- Brian's transparencies can be found as Beams docDB #1874.
- Brian gave a nice talk about MI states, TCLK, MDAT, LLRF, BSNYC, etc. Refer to his slides for some of the details. Much of the discussion focussed on trying to understand how the MI BPM measurements can be synchronized with the actual conditions of the machine, i.e., when the beam is injected, when it is extracted, etc. I6 has much of the information. Is there a way to use I6 or some copy of I6 to control the BPM readout?
- In the end it was stated that the BPMs should know what data to take and when to take it. The detailed implementation and agreed upon defaults are still under active discussion.

Dave Capista - Ideas about data requirements

- Dave showed some further development of his ideas for MI data taking (the updated buffer diagrams found in docDB #1834-v4).
- This generated much discussion about the details of TBT, CO, etc. but the basic idea is that the BPM will be in either 2.5 MHz or 53 MHz mode and in either narrow band or wide band mode.
- Dave also described the possibility of having a hardware trigger that could be available at all the MI buildings and would come prior to the arrival of beam from Booster. This would simplify the triggering for injections (from Booster).
- Dave also described a set of I6-type messages that could control the BPM to take 53 or 2.5 MHz wide or narrow band, and what attenuation value to use for 53 MHz front-end.
- This led to even more discussion about defaults, strategy for data-taking, buffers, etc.
- It is clear that much more discussion is needed to come to a final design that is clear, robust, and maintainable.