

Notes from 11/04/04 Tevatron BPM Upgrade meeting
Jim Steimel

Modes of Operation -- Jim Steimel

We continued discussion on the buffer diagram, states of the system, state transitions, and triggering mechanisms. Many of the conclusions of the discussion are now located on the diagrams in Beams-doc-1358-v2 <<http://beamdocs.fnal.gov/cgi-bin/DocDB/ShowDocument?docid=1358&version=2>>. Significant changes from old slide include a separate first turn, turn-by-turn buffer from the standard turn-by-turn buffer. This means that the turn-by-turn data from the first turn will stay resident until the next first injection, even if there are turn-by-turn studies during the store. The first-turn buffer will be 8192 points. The first turn position and the first turn closed orbit will be derived from this buffer. Currently, the first turn closed orbit is defined as a 64 position average of the first set of turns after the first 500 turns of injected beam.

Envelope Filter -- Gustavo Cancelo

Gustavo and Eric have tested the envelope filter parameters on an Echotek module with positive results. Next week they will attempt to reprogram one of the Echotek FPGAs to see if they can get the full version of the filter working.

Crate Installation -- Bob Forster, Vince Pavlicek, Bob Webber, Jim Steimel, Mike Martens, DeHong Zhang

We had a discussion about the benefits of preinstalling all of the VME crates during the shutdown. Although there would be benefit to having the crates preinstalled because installation of the VME cards can occur during beam time in the Tevatron. However, Bob Forster is concerned that transferring cards from one crate to the next may not be seamless. Debugging problems at the service building will be difficult if not impossible. We decided the safer bet is to install the crates as they are constructed in the test stand area and move them during beam off periods.