

RHIC BPM Meeting

July 24, 2008

Minutes

Attendees: Justin Gullotta, Rob Michnoff, Michiko Minty, Bob Olsen, Todd Satogata

1. Justin presented a description of the BPM calibration procedure. (presentation is attached separately).
2. Some action items/issues resulting from Justin's presentation and group discussions include:
 - A calibration procedure needs to be written, explaining details for using the appropriate VIs, required equipment, and setup connections. Molly had written a good procedure a few years ago but this is now outdated.
 - A status word bit will be added to identify data as "calibration" data.
 - Automated code to perform a timing calibration with beam must include:
 - a. Confirmation that timing is correct, and that Acorr and Bcorr measurements are reasonable.
 - b. Changing timing to ensure that the beam pulse is within the timing gate – that is, set timing values to self-trigger values.
 - c. Setting the CAL KEY and trigger source to proper values to allow calibration to occur when trigger is generated.
 - d. Generation of turn-by-turn trigger to initiate calibration sequence.
 - e. Resetting trigger source to prevent calibration on subsequent turn-by-turn triggers.
 - f. Confirmation of successful calibration. A method to revert an unsuccessful calibration must be developed.
 - Testing with beam must be performed to:
 - a. Sweep fixed timing trigger around beam pulse peak (approx. +/- 5 ns) to check position variation based on trigger timing.
 - b. Perform timing calibration.
 - c. Perform sweep of fixed timing trigger again to confirm that position variation is nearly flat.
3. Upcoming efforts
Reference previous meeting notes. Upcoming efforts have not changed significantly.