

Minutes: SBS Meeting January 8, 2014

Attendees: Alexandre Camsonne, Bogdan Wojtsekhowski, John LeRose, Kondo Gnanvo, Mark Jones, John Annand, Seamus Riordan, Andrew Puckett, Mitra Hashemi Shabestari, Nilanga Liyanage, Adam Sarty, Guido Urciuoli, Evaristo Cisbani

1. Kondo Gnanvo gives report on GEM spatial resolution studies and status
 - a. See [linkpdf](#) or [linkpptx](#)
 - i. Shows setup at FNAL
 1. Gives details of setup (beam profile, rates, etc.)
 - ii. Position correlations of trackers
 - iii. Position resolution (combined $\sigma = \sqrt{\sigma_{exclusive} \times \sigma_{inclusive}}$) $\sigma_x = 58 \mu\text{m}$, $\sigma_y = 68 \mu\text{m}$
 - iv. Bogdan has questions about the gain. Answer they're working on it. Present estimate is 5000-8000
 - v. Status of construction of SBS3 (60 x 50 cm²)
 1. Assembly completed before Christmas
 2. Finalizing details
 3. Expect to apply HV and check signals tomorrow (1/9/2014)
2. John Annand presents Update on Front End NINO Electronics
 - a. See [link](#)
 - i. Photo of the latest card
 - ii. Things that have been "fixed". Basically, the removal of a capacitor results in much more stable operation.
 - iii. Bogdan asks what the threshold voltage range is? 1-20 mV on 50 Ω
 - iv. 23 ns double pulse resolution
 - v. Pulse train: no losses
 - vi. Shows bench test setup
 - vii. Time walk effect: with corrections $\delta t \approx 0.5 \text{ ns}$
 - viii. Outlook
3. Bogdan Wojtsekhowski
 - a. BigBite and SBS together with detectors field problems
 - i. Large field on BigBite detectors
 - ii. Suggests changing coils on the SBS magnet (increase saddle turns, decrease racetrack turns)
 - iii. PM comment: This is awfully late in the game. We've already ordered the racetrack coils! Study should have been done a year ago.
 - b. Progress on testing of lead glass high temperature annealing tests
 - i. Lead glass delivered to U of Idaho in December. Waiting for beam to be irradiated.
 - ii. Oven parts are in-house
 - iii. Ordered various other parts
4. Re upcoming meetings, send ideas for agenda items to Brian (<mailto:bquinn@cmu.edu>)

-JLL