

# g2p/GEp Beam Transport Meeting Minutes

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**Attendees:** T. Michalski, P. Kjeldsen, R. Lauz , E. Folts, JP Chen, S. Wood, P. Degtiarenko, K. Allada, D. Williams, B. Dillon-Townes, A. Camsonne, P. Zhu, K. Slifer

The following is a summary of issues discussed during the g2p/GEp Beam Transport Meeting:

- The installation of the SR stand was delayed due to two interference issues. One has been corrected, the other will be corrected with installation planned by the end of the week.
- The SR needs to have quantity 4 RG-58 cables run from the counting house down to the electronics rack. We need to define an actionees for this. Bill Gunning will take care of the rest. Note that the SR is in the hall now.
- Keith Welch has a box for housing the LC dump inserts. Action Item closed.
- It was mentioned that 2 collaborators want to put stuff in the hall this fall. There is nothing in these requests that will affect the beamline.

## **STATUS:**

### **OPTICS:**

- Nothing new to report.

### **MAGNETS:**

- Nothing new to report.

### **BEAM TRANSPORT:**

- Region 1 – making alterations to the SR stand in order to address some interference issues with hardware in the hall. These are items which are not in the layout for the hall.
- Region 2 – the upside down girder is in the hall, awaiting the Harp. Need to discuss the turbo pump location and how it will be supported with Ed.
- Region 3 – The FZ2 stand is on track. Butch to visit supplier at the end of the month. The moving mechanism will be shipped directly to the supplier, 6/21. Several runs are very close. Need to discuss this with Physics to see if they can accommodate or must be fully aligned. Butch stated they were fractions of a mm.
- Schedule for the arms and girders is complete and should get things on schedule for installation. Request made for a couple weeks of designer support to make sure material is ordered on time.
- Harps – creating a video on how to wire the harp using the fixture.
- Viewer – flag here, ready to go.

### **RAD CON:**

- Nothing new to report.

### **SOFTWARE:**

- Brian Bevins needs BPM receiver hardware for his SW development/testing.

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## **VACUUM:**

- No status report.

## **INSTALLATION:**

- Ed stated the SR and FZ1 stands should be installed by week's end.

## **ALIGNMENT:**

- Aligning the stands on Monday.

## **EES – I&C:**

- The BPM receiver board is here.
- Harp – control chassis board ordered.
- Need progress report on Transport modules – update is that they are on track for complete assembly and install by September (per Pete Francis).

## **EES – DCP:**

- Moving the output connector to the top of the PS and adding voltage verification (electrician).
- No acid washing is required – per Bill Merz.
- Fabricating the polarity switch sheetmetal cover. On track to deliver to the hall next week.

## **EES – SSG:**

- No status update

## **TARGET/DUMP DESIGN ACTIVITIES:**

- No status update

## **PHYSICS**

- No status update

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## Action Items:

Action Item #	Date Added	Action Item	Responsible Individual	Due Date	Date Closed
11	9/28/10	Define the settings for chicane magnet current monitoring.	Y. Roblin	TBD	
36	1/11/11	BPM testing with new electronics in North Linac – ½ done	J. Musson / D. Williams	???	
37	2/1/11	Resolve open question on FZ magnet power supplies.	V. Chen	6/23/11	
49	6/7/11	Address potential schedule issues with shifts in Harp controller chassis and Harp assembly completion dates	T. Michalski	6/21/11	6/14/11
50	6/7/11	See if Hall A Radcon box is acceptable for storing tungsten inserts for the dump.	E. Folts	6/14/11	6/14/11
51	6/14/11	Run quantity 4 RG-58 cables from the counting house to the SR electronics rack.	TBD	TBD	
52	6/14/11	Brian Bevins needs BPM receiver hardware for his SW development/testing.	D. Williams	6/28/11	

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## Design Decisions:

Date	Decision Item
8/31/10	The transport line exiting the FZ2 will have no vacuum connection to the target chamber. A beryllium window will terminate that line.
8/31/10	<del>M20 BPM's were decided to be used on the transport line exiting the FZ2.</del>
9/14/10	The Target will only be set at 80° and 90°, not 70°, per Al Gavalya.
9/14/10	The gap between the beam tube end and the target window was discussed. It should be minimized – consider 1 cm as a maximum gap. Re-opened during 9/21/10 meeting – look at using helium bag. Will use helium bag – issue closed.
9/30/10	The requirement for BPM accuracy is 0.1mm – per discussion at BPM requirements meeting and subsequent analysis/e-mail from K. Allada.
12/6/10	Use 5.5" M15 antenna style BPMs in articulating arm!
12/6/10	JP committed to a 2 cm raster, if need be, to accommodate threading the beam through the articulating arm.
1/11/11	Decision to use harps in tune mode rather than low current.
4/5/11	We will not accommodate a special 1.1 GeV run with the target at the pivot. There will be no change to the FZ2 stand design and no need to reposition the chicane. Evaluation of 1.1 GeV beam through 2.2 GeV chicane position to be performed.
4/18/11	<del>It was agreed that we will be moving the target up 9cm for the 1.1, 1.7, and 2.2 GeV runs when the target is in the 87cm upstream location. For the 1.1 and 1.7 GeV runs, the target magnet will be at 2.5 T, versus the 5 T for all other runs. Issue resolved without having to raise the target.</del>
4/26/11	Decision to use 4'x4' platform for Al magnet and address any safety issues – rather than alternative to use existing stand in BSY which requires rework.