g2p/gep Beam Transport Meeting Minutes

<u>Attendees:</u> P. Kjeldsen, J.P. Chen, D. Higinbotham?, E. Folts, A. Gavalya, P. Degtiarenko?, Dillon-Townes, A. Camsonne, K. Allada, J. Zhang, D. Williams, R. Lauzé, T. Michalski (didn't get a good list of attendees so I apologize if I did not capture some who were in attendance)

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

Tim Michalski was introduced as the new Project Lead for the beam transport portion of g2p.

STATUS:

OPTICS:

• No status update

MAGNETS:

- Question regarding power supplies for magnets; is one broke?
- FZ1 and FZ2 magnets may require additional mounting holes for mounting in g2p experiment configuration.

BEAM TRANSPORT:

- Question raised on window size for the target, based on layouts presented by D-T.
 - o Is it with raster?
 - o Dimension presented as 3.521" and was stated to be different than previously discussed.
- Beam tube for replacement of the upside down girder (Region 2) needs to be 1.5" ID. Needs to accommodate raster diameter (25mm at target) plus tolerance/clearance (stated as 1cm is that radius or diameter?)
- Beamline drawing by the end of September, 2010.

RAD CON:

- Ion chambers how many and where?
 - Needs a designated owner.

SOFTWARE:

• No status update

VACUUM:

• No status update

INSTALLATION:

• No status update

ALIGNMENT:

• No status update

ELECTRONICS:

- M20's will be used for the BPMs.
- Awaiting arrival of protos, then a couple of weeks to assemble and test.

TARGET/DUMP DESIGN ACTIVITIES:

- Window for higher energy straight through experiment runs do they need one for high and one for low energy?
 - Transverse pumping and angled pumping
 - Alumina versus Beryllium
- There will be high current runs at 30 μ A straight through to Hall A dump.
- J.P. stated that the beam current for the majority of the runs will be 50-120 nA
 - Both scenarios target at pivot and target 87 cm upstream

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Action Items:

Action Item #	Date Added	Action Item	Responsible Individual	Due Date	Date Closed
1	8/31/10	Upside down quad girder to be removed from Region 2 of the layout	LDT	9/21/10	
2	8/31/10	Move corrector magnets from eliminated upside down girder in Region 2 to beamline before the FZ1 magnet	Y. Roblin	9/21/10	
3	8/31/10	Contact Mark Jones from Hall C to secure commitment to HALL A for the usage of the FZ1 and FZ2 magnets and their associated power supplies	J.P. Chen	9/21/10	
4	8/31/10	Provide data on target thickness, duration of run times, and energy during those runs, etc. to develop radiation events for the experiment to RADCON	TBD	TBD	

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	M20 BPM's were decided to be used on the transport line exiting the FZ2.		
8/31/10			