

# 07.07.2011 Weekly Meeting (with meeting notes)

Here is the agenda from the July 7th meeting, with notes by Maurik. Feel free to edit.

## Agenda:

### 1. Next iteration on project scheduling -- Maurik/All

We need to construct a schedule for the software development, including milestones and critical path. The starting point for this will be the [HPS Required Software](#) page. Please update that page with any changes you have.

It was suggested that the schedule focusses on the test run. The post test run analysis and full experiment schedules can come later.

### 2. Update on constants database -- Homer

Homer talked with Igor, one of the designers of the Babar database system. Igor seems enthusiastic for another experiment to use his software and is eager to contribute. He will get together with Homer and Tim to work out some of the requirements for HPS and get this setup.

John pointed out that the HPS has no budget for hiring people to do software development for HPS, so we need to check with Igor that this is OK. Homer will verify.

### 3. Update on coordinates choice -- Matt

Matt gave a presentation on the changes he made to get SLIC & org.lcsim to work in the "Jlab coordinate frame". He changed the Geomconverter and with help from Jeremy added a new magnetic field: "BoxDipole". Changes to the reconstruction code allowed for tracking to function with this rotated geometry. This code will be committed to cvs soon.

Vertexing is still in the old lcsim frame, so this still needs to be changed.

Matt will also update the example codes so that others can learn how to use the new setup.

### 4. Update on Gemc to org.lcsim -- Ebrahim

Ebrahim gave a presentation on his change to Gemc to make it compatible with org.lcsim. He now has LCIO output out of Gemc, including complete tracker hit objects. An issue seems to be that it is difficult to create the MCParticle object from Gemc in the same manner as it is done in SLIC. It was noted that MCParticle objects should not be needed to get tracking to work.

To make this all work, Ebrahim created a script that will convert the LCDD output from Geomconverter to a table in the Gemc database, so that geometry is identical between the two systems.

Matt volunteered to Skype with Ebrahim to get tracking working properly.

### 5. Other updates?

Omar reported on the L3 trigger. He wanted to know if the system will allow streaming of events to a running lcsim thread, or whether a new thread needs to be started for each event. Starting a new copy of lcsim is slow, because the Java codes needs to compile and optimize itself. Streaming events will indeed be possible. The events will need to be "fanned out" to a number of different threads. The best way to do this will still need to be investigated.

John asked about the status of overlaying events, specifically, the analog signals of the events before these are digitized. The concern is the performance of the trigger system when we do not have the FADC system and have only a "one bit" trigger. This is on our schedule but we need to make sure it does not get overlooked.