

Minutes of the tenth SiD optimization meeting

15-October-2014

Present:

Marty Breidenbach (MB)

Marcel Demarteau (MD)

Norman Graf (NG)

Joel Goldstein (JG)

Jan Strube (JS)

Agenda and Points of discussion:

1. Recap of LCWS
 - a. Briefly went over some items from LCWS. Discussed the presentation of the ILC physics case at the workshop. Several people expressed the desire to contribute more to the process. We are pondering how to communicate this to the LCC management and will try to pursue several avenues.
 - b. The estimation of ILC computing requirements is still ongoing in collaboration with ILD. First estimates will be forwarded to Akira Yamamoto before November, with a more detailed document expected before April 1st, 2015.
2. Status of the simulation of the scintillator calorimeter
 - a. Attempts to make this roughly commensurate with CALICE results, but in absence of active groups, this has not been thoroughly validated. Functionality for adding noise has been implemented in a package from NIU, but this is not currently the default. An integration time needs to be chosen to determine a realistic level of noise.
 - b. We need to get this ready to compare scintillator HCAL to RPC HCAL. JS will contact Felix Sefkow to ask for help with validation and to learn details about the ILD simulation of the scintillator calorimeter, in particular the implementation of Birks' Law.
 - c. RPC Simulation still needs lots of improvement before a realistic comparison is possible. In particular the calibration is a lot more difficult for the beam test data than for our simulation. MD will contact Jose Repond to ask for code.
 - d. Goal is to have this well underway by the meeting at SLAC in January.

Tentative Agenda next week:

Bruce Schumm, FCAL studies at SCIPP

Masakazu Kurata, Particle ID for reconstruction improvements

Action Items:

JS: Contact Felix Sefkow about details of scintillator simulation in ILD and help with validation.

MD: Contact Jose Repond about code for the RPC simulation