Minutes of the seventh SiD optimization meeting

September 10th, 2014

Present:

Marty Breidenbach
Marcel Demarteau
Marcel Stanitzki
Oliver Reardon-Smith
Jan Strube

Agenda:

1. Summary of SLAC ECal Studies - cancelled
2. Discussion of the request for estimation of SiD campus computing resources

Points of discussion:

1. Discussion of the request for estimation of SiD campus computing resources
   a. Slides were prepared for ILD by Akiya Miyamoto from KEK
   b. Numbers on CPU and memory estimations still have large error bars. In particular processing time in presence of background may be underestimated
   c. ILD assumes storage of at least two full copies of unfiltered data from the detector. SiD preference would be to establish filtering algorithms that remove background hits in the inner sub-detectors to reduce data size and store this processed data. Some small streams of unfiltered data could be kept to continuously monitor the performance of the filtering algorithms. The estimated ratio of unfiltered to filtered data size is about 4:1. Additional lossless data compression up to a factor of 6 may be possible. More detailed numbers should be prepared and fed back to Japan for the planning of the campus infrastructure.

The next meeting will be on Wednesday, September 17th