

FCAL Clustering WG.  
Meeting Minutes.  
June 24, 2015.

Sasha presented short Update on FCAL Software Status:

- LumiCal geometry is hard coded. After the correction it shows consistent results with LuCaS simulation;
- Code to be updated in svn.
- New BeamCal reconstruction implementation is usable in ILD reconstruction, but requires some tuning.

Bruce presented an update on BeamCal Reconstruction Study at UCSC.

- Detailed description of the reconstruction algorithm has been presented;
- Study focuses on optimizing reconstruction based on 10% threshold for mis-identified BeamCal signal events. Optimization parameters are: segmentation and Pallette size, static vs dynamic formation of palletes, effect of AntiDiD field.
- The list of other activity was presented: BeamCal geometry and positioning, detailed B-field implementation, stau/chi<sup>0</sup> analysis.

During the discussion Andre offered his help in adapting the format of the simulated data to be used directly with existing BeamCal cluster reconstruction code. Additional problem for this approach comes from the fact that the final BeamCal geometry is implemented in reconstruction and there is a code to recalculate the background from the simulation on the fine grid to the one in “real” BeamCal geometry. The idea is to use an external file to describe the final geometry, like XML or something else to solve it.

Following the Sergej's request we made an attempt to discuss the candidate to take the responsibility on tuning the BeamCal reconstruction for ILD. Lucia could probably be a good candidate based on her work on BeamCal segmentation optimization. There were no representatives from many of FCAL institutes so it was impossible to make any decision in this concern.

On Leszek's suggestion, Andrey informed he will give a remote talk at High Level Reconstruction Week that takes place at DESY from July 6 to 10, 2015 and will try to include some information about the status of the reconstruction software development in FCAL.

Next meeting was scheduled to take place on July 15, at 4pm (CEST).