FCAL Clustering WG. Meeting Minutes. February 16, 2015.

Oron presented Update on Beam Test Data Reconstruction in Telescope:

- After improvements in alignment procedure suggested by Tobias (Aarhus University) the beam angular distributions in XZ plane is just about 30%-40% wider then in YZ plane, depending on the type of particles (electrons / hadrons). In previous evaluation the difference was more then 200%.
- RMS of track residuals slightly decreases as the the track with smaller angles with respect to XZ and YZ plane are selected.
- The occupancy of the planes of the telescope is still not completely understood and investigation goes on.

Konrad presented the outcome of the discussion with beam expert about T9 beam properties.

• It appeared that the information is consistent with the results presented by Oron.

We may conclude that at present we learned quite well the software we got from Aarhus university group for telescope data reconstruction and we can use it for LumiCal beam test data analysis.

Andrey gave a talk on BeamCal Background Parameterization:

- It was demonstrated that three-parametric Gaussian-like function can well describe the distribution of energy deposition in each pad of BeamCal for a bunch crossing;
- Current approach does not take into account the correlations between pads which are important for a realistic simulation.
- Straightforward account of correlation is quite complicated and makes the idea of parameterization less attractable for real simulations. Simplified approaches are being investigated.

Next meeting was scheduled to take place on March 2, at 5pm (CET).