

Minutes of the 35th SiD optimization meeting

19-May-2015

Present:

Christopher Milke (CM)

George Corcoubetis (GC)

Bruce Schumm (BS)

Anne Schütz (AS)

Jan Strube (JS)

Last week's Work Items:

- Create Confluence page for the background studies. Should document basic steps for generating the guineapig pairs and the conversion to LCIO files. (AS)
- Create script that combines the three different steps for converting from ASCII to hepevt, from hepevt to stdhep, and merging a number of particles into the same event for easier processing into one script to convert from ASCII to LCIO. (AS)
- Provide starting point in GeomConverter for implementing a cylinder rotated around the IP by the crossing angle. (NG)

Agenda and points of discussion:

1. FCAL occupancy studies (GC)
 - a. The studies also consider -30/-80 polarization, which is not considered in our current running scenarios.
 - b. The pair background is assumed to be 1.2 gghad / BX. This is different from the DBD value, which did not take into account the correct gghad luminosity. The correct values at other energies can be obtained from here: <http://agenda.linearcollider.org/event/6000/session/35/contribution/60/material/slides/1.pdf>
 - c. Some channels that were used look like they might have overlaps with gghadron files. Tim Barklow confirmed per email that this was indeed not the case.
 - d. The number of pair BX was less than a whole train. No weights were applied to make up for this lack of events, so the occupancy due to pair background is currently underestimated.

Wok Items:

- Make an x-y plot of the hits to confirm the geometry used for all files was indeed the same. (GC)