

Minutes of the 43rd SiD optimization meeting

13-Aug-2015

Present:

Marty Breidenbach (MB)

Joel Goldstein (JG)

Richard Kriske (RK)

Tom Markiewicz (TM)

Christopher Milke (CM)

Marcel Stanitzki (MS)

Jan Strube (JS)

Anne Schütz (AS)

Andy White (AW)

Last week's Work Items:

- Re-make the MIP response plots in units of MIPs to compare with DESY plots. Poisson statistics of how many SiPM pixels fire might still have to be implemented. (JS)
- Contact Tom and Marco regarding the open questions about the engineering design (CM) ← DONE
- Contact DESY regarding new guineapig files (BS) ← DONE
- Generate SUSY files according to SLHA records (TB) ← DONE
- Validate values in LCD tab of spreadsheet w/ engineering values. (TM) ← DONE

Agenda and points of discussion:

1. Guineapig studies
 - a. First iteration is set up to run to completion on DESY farm. few h per train
 - b. Converter to LCIO is working. ~4.3 GB / train
 - c. Files need to be uploaded to grid and validated.
2. Forward Region layout
 - a. New simulation model is now (nearly) consistent with engineering model. Remaining numerical changes will be implemented after correspondence with TM
3. Anti-DID studies
 - a. Some inconsistencies in the beampipe dimensions have been resolved. The new dimensions appear to make the Anti-DID even less attractive.
 - b. Options for installing a polyethylene mask were discussed. This needs to be studied in full simulation, with a detector model that extends beyond the beamcal.

New Work Items:

- Re-make the MIP response plots in units of MIPs to compare with DESY plots. Poisson statistics of how many SiPM pixels fire might still have to be implemented. (JS)
- Send scripts to JG to get students set up (JS)
- Contact ILD experts to help with validation (JS)