Minutes of the 59th SiD optimization meeting

23-Mar-2016

Present:

Marty Breidenbach (MB)
Richard Kriske (RK)
Tom Markiewicz (TM)
Andrew Myers (AM)
Ross McCoy (RM)
Christopher Milke (CM)
Chris Potter (CP)
Aidan Robson (AR)
Bruce Schumm (BS)
Jan Strube (JS)
Andy White (AW)

Previous Work Items:

- CM to re-make plots of hit distribution at face of beam cal with/without Anti-DID.
 Re-make plots of ECAL occupancy to be clearer about how many hits get lost as function of buffer depth ← DONE
- AS to implement updates to plots as laid out in slides ← DONE

Agenda and points of discussion:

- 1. Infrastructure: Discussed several collaborative tools
 - a. Video Conference: Blue Jeans seems to work fine
 - b. Chat / support / exchange of ideas: SLACK (https://silicondetector.slack.com) seems good. More experience needed.
 - c. Version control / code sharing: github (https://github.com/SiliconDetector) might be a conclusion. Decision deferred.
 - d. Bug database: Waffle (https://waffle.io/SiliconDetector/DetectorModels) might be OK. Good integration with github. Decision deferred.
- 2. UCSC updates:
 - a. Christopher added plots of the number of cells that are hit at a given z layer. It looks like many of the hadrons are extremely penetrating. This should be understood.
- 3. Round table
 - a. Glasgow will add an MS student to also work on the detector simulation.
 - b. Chris Potter uploaded the Delphes card for SiD to hepforge https://dsid.hepforge.org/

- c. UTA has added two students to work on calorimeter studies
- d. UCSC: In addition to what CM presented, work ongoing to study the SUSY kinematics to understand how to simulate a year (or more) equivalent of ggHadron background.

New Work Items:

- Plot the energy distribution of the particles from ggHadrons that enter the calorimeter.
 (CM)
- Contact Anne & Tim about generating backgrounds at 1 TeV (JS)