

Monte Carlo Production status

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Centralized MC Production

- Monte Carlo for CALICE
 - Mokka: Simulation of physics (hadronic/em shower)
 - Geant4 as backend
 - Marlin: Digitization
 - e.g. SiPM effects (saturation, temperature, ...)
- Centralized MC Production
 - Latest production: <https://twiki.cern.ch/twiki/bin/view/CALICE/MonteCarloFiles>
 - Python scripts for NAF (National Analysis Facility @ DESY using Sun Grid Engine)
 - Create steering files
 - Submit
 - Check LCIO output & resubmit
 - Generate TWiki entry
 - Upload to grid

Software version

- Latest version
 - Mokka v07-07p05 with Geant4 9.5
 - Calice v04-06 with ILC software v01-13-02
 - new detector model for Fermi Lab: TBfna10508_p1211
- Bug discovered in Mokka @ end of last year
 - Access to out of array bounds ==> overwrites internal memory
 - Effect unpredictable (might even affect physics)
 - Must not be used for publications
 - All versions prior to Mokka v07-06-p03-SDHCal affected
 - Some of the productions were redone
 - Only Cern 2007 data pi+/- & proton
 - Mokka v07-07p04 with Geant4 9.4.p03 (as in ILC Soft v01-13-01)
 - Needs newer Geant4 than original request
 - If one is missing: please contact me (now or weuste@mpp.mpg.de)

Alignment

- [Position of ECal to HCal not fixed during testbeam (especially in CERN 2007 period ==> stage)
- [In current MC production:
 - Fixed offset between HCal and ECal
 - During digitization: cell position is updated to recreate position as in CondDB
 - Misalignment
- [Plan: Script for Mokka steer file creation
 - Add to calice_run
 - Queries CondDB to get same values as used during digi/reco
 - Needs calice db tools for this
 - No info for FNAL available currently