

Software update

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LCDG4 updates

- Implement org.lcsim compliance
 - Barrel and endcap hits go into separate collections (done)
 - Redefinition of cellID bits (using longs, not ints)
- Need either .ini or .lcdd description of SDNPCalMar05 for analysis / studies

DigiSim updates

- SmearLinear modifier also tested
- To do:
 - Split DigiSimProcessor, to separate digitizer logic from framework interface
 - Implement run-time configuration
 - Need to develop/test complex digitizer schemes
 - Ecal+HCal
 - Digitizer configurations with multiple modifiers
 - Implement run-time configuration

Software status report

Overall goal: detector optimization and PFA studies for Snowmass (August)

- org.lcsim: Official java framework for LCIO analysis
 - DigiSim port for java (modifiers tested, some development is still needed to reach same status as the C++ version)
Raw hits and LCRelations aren't displayed by JAS+org.lcsim plugin (done)
 - Clustering algorithms - Superlayers (old) and neighborhood density (new)
 - Non-projective geometries
- DigiSim
 - Crosstalk modifiers (started before LCWS)
- LCDG4 maintenance
 - EMCAL cell staggering (tests)
 - Multiple primary vertices (diagnostics)
 - Changes for org.lcsim compliance (barrel/endcap separation (done), redefinition of cellID bits)
- NP geometries into SLIC and LCCDD