Software update

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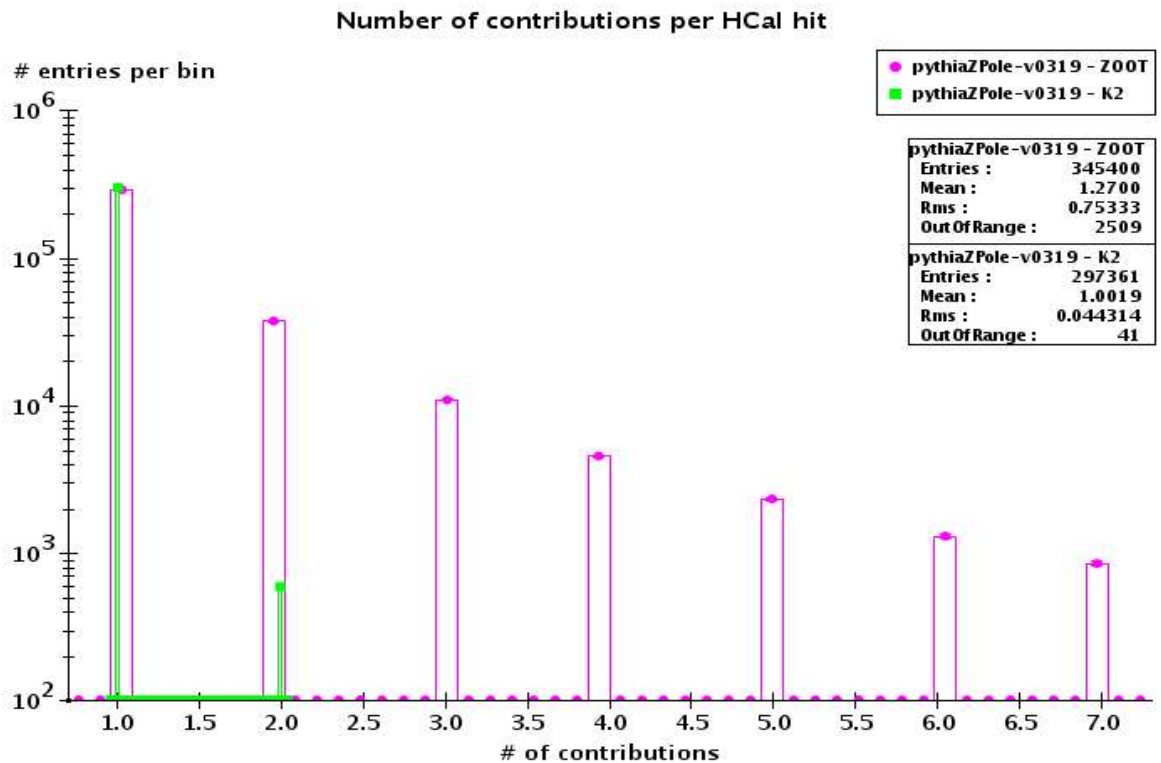
ILC software news

- org.lcsim, SLIC, LCDD, LCCDD, LCCD
- org.lcsim to replace hep.lcd (Java 1.5)
- SLIC (Simulator for the Linear Collider)
  to replace LCDG4 (more realistic geometries), based on LCDD/GDML, operational for some geometries
- LCCDD (LC Compact Detector Description)
  to replace hep.lcd *Detector.ini*-like detector description
- LCCD (LCIO-based Conditions Database, in C++)
  org.lcsim also supports it for java

LCDG4 Status

- Version v03-19 used for Dhiman's presentation
  - Based on Geant4.7.0.p01 and LHEP
- Bug found on the contribution multiplicity in calorimeter hits
- XML support for EMCal cell staggering (future CVS release)
- Support for multiple primary vertices



Post LCWS05 – things to do

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

Suggestions for prioritizing the items are welcome

- org.lcsim: Official java framework for LCIO analysis
  - DigiSim port for java (under way, almost complete)
  - Handlers for LCDG4 data
  - Non-projective geometries
  - Clustering algorithms - Superlayers (old) and neighborhood density (new)
- NP geometries into SLIC and LCCDD
- DigiSim
  - Crosstalk modifiers (started before LCWS)
  - CVS releases (DESY/C++ and java/SLAC)
- LCDG4 maintenance
  - Bug fixes (zoot vs. k2 cluster)
  - CVS repository cleanup
  - EMCal cell staggering (tests)
  - better LCIO compliance (sim status bits and decays inside calorimeters)
  - Multiple primary vertices (diagnostics)