#### ILCSoft release v01-07

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#### Move to SVN

- Both the cvs repositories holding ILCSoft and Mokka:
  - cvssrv.ifh.de
  - pollin1.in2p3.fr:/home/flc/cvs

have been migrated to new SVN repositories at:

- <u>https://svnsrv.desy.de/</u>
- <u>http://llrforge.in2p3.fr/svn/Mokka</u>
- nb: there are some issues with the logs messages from the old Mokka cvs repository which are currently in the process of being resolved.

# LCIO - v01-12

- added quality bit field for TrackerHit
- new features in java/lcio
  - output directory in split command
  - Poisson distribution in merge command
- bug fixes
  - allow multiple open of file
  - fixed seg. fault with missing PID in LCTOOL::dumpEventDetailed
  - SIOReader: check if all files exist before start of reading
  - fixed support for optional linkage against libdcap

#### GEAR - v00-13

- Added VersatileDiscRowLayout:
  - new flexible pad layout for polar coordinates
- Implemented modular TPC endplate functionality
- bug fixes
  - swapped getRightNeighbour / getLeftNeighbour in FixedPadSizeDiskLayout
  - use class variable for \_maxDriftLength and \_coordinateType make polar coordinates default
  - fixed missing xml in/output for generic parameters in TPCParametersXML and TPCModuleXML

#### Mokka – mokka-07-02

- Contains the New detector model ILD\_00fwp01 containing fieldmap of the B-Field
- New TPC Sensitive Detector and dedidcated step limitation for low Pt charged particles in the TPC sensitive volume TPCStepLimiterLowPt
- New FTD driver SFtd05.cc to fix bug in cable thickness in SFtd04.cc
- Modified TBhcal07 driver
- Set of small changes permitting proper simulation of CLIC\_ILD Detector
- New sub-detector SLcal03
- Several bug fixes see Release notes for details.

## MokkaDBConfig – v01-01

- This package has been newly added in this release
- Contains a set of scripts which make using a local Mokka DB more straight-forward
- This is useful for use on the GRID as well as development
- Contains a wrapper script for using Mokka on the Grid which will:
  - install the DB
  - Run Mokka using supplied arguments
  - clean-up and remove the DB
- See README for usage

### Marlin – v00-10-06

- Updated documentation
- removed old GNU makefiles
- bug fix
  - added #include <cstdio> for gcc 4.4.1

#### MarlinReco – v00-17

- TrackDigi
  - TXDigi, cluster parameter class for user extension of SimTrackerHits
  - Introduced coordinate transform for direction vectors in VXDGeometry. New class for coordinate transform between ladder and lab frame
  - Salt'n pepper noise hits with cluster parameters
  - Evolved version of TPCDigi that provides additional functionality to deal with background. Coupled to the Mokka Sensitive Detector Driver. TPCSD03.cc
  - VTXDigitizer.cc, added possibility to store for each digitized tracker hit information on the fired pixels
  - Initial version of VTXBgClusters

#### MarlinReco – v00-17

- Tracking
  - removal of hard-coded cut on Chi^2 throughout F77 code
  - removed dangerous revision of impact parameters d0 and z0 in MarlinTrackFit.cc
- CaloDigi
  - Updates for digital and semi-digital HCAL readout of DHCAL
- PFOID
  - Update the hcal calo type determintation to use Helper class from MarlinUtil for decoding/encoding lcio::CalorimeterHit types for ILD

#### MarlinReco – v00-17

- MarlinKinfit
  - Global covariance matrix now also filled by NewtonFitter
  - Added Tracer classes and access to global covariance matrix in BaseFitter
- ZFinder
  - New package for finding Z->I+I-

#### Pandora – v03-02

- protection against MCParticle null pointers
- Fix to PandoraPFAProcessor remove hard-coded arrays
- DHCAL related minor mods
- Tidying up

### Overlay - v00-07

- used for IDAG background studies
- added overlay of many bunch crossings for TPC hits, properly shifted in z according to time structure.
- introduced random rotation of TPC hits in azimuthal angle
- added LCIO::THBIT\_MOMENTUM for newly created TPC collections
- MCParticle pointer set to 0 for non-VXD SimTrackerhits

#### CED - v00-07 & CEDViewer - v00-07-01

- added new Fisheye view functionality
- added server client communication
- started to add picking functionality
- a couple of bug fixes

#### LCCD – v00-06 & CondDBMySQL\_ILC-0-7-3

- added collection name to collection parameter "CollectionName" in IConditionsChangeListener so that implementors can acces it, via
  - std::string colName = col->getParameters().getStringVal("CollectionName");
- A new method added DBInterface::findNextValidCollection which retrieves the next valid collection from the given point in time, searching forward in time
- findNextValidCollection is used in DBCondHandler::update to prevent the DB from being repeatedly querried for every event while no collection is available.
- It should be noted that the ChangeListeners will not be notified if no valid collection is found, a warning is printed. This is being fixed for the next release.

#### ilcinstall & CmakeModules – v01-08-01

- improved mac osx compatibility
- use readlink for dereferencing symbolic links in FindJAVA.cmake

#### Unchanged for this release

- SiliconDigi v03-02
- RAIDA v01-04-03
- LCFIVertex v00-03
- MarlinTPC v00-03-01
- EuTelescope v00-00-07

These should be tested against this development release

## Summary

- ILCSoft v01-07 is a development release
- It has not been tested for physics studies
- We plan to make another release before Christmas
- Please report any problems asap through the usual channels