

org.lcsim Package overview

Package Overview

Most authorship, description etc are guesses, and could be completely wrong. Please update as necessary.

Contrib

Package	Author	State	Docs /Talks	Description	
org.lcsim.contrib.CalAnal	?	?		?	
org.lcsim.contrib.CarstenHensel	Carsten Hensel	?		HMatrix cluster analysis	
org.lcsim.contrib.Cassell.recon.Cheat	Ron Cassell	?		Cheat Recon driver	
org.lcsim.contrib.EricBenavidez.EMClusterID	Eric Benevides	?		HMatrices analysis of single particle events	
org.lcsim.contrib.JanStrube.tracking	Jan Strube	complete JUnit tests Javadoc	A New Track Interface	Alternate implementation of Track, FastMCTrack, Swimmer. Awaiting incorporation into main body of code	
org.lcsim.contrib.JanStrube.vtxFitter	Jan Strube	incomplete		Vertex fitter, using the Kalman approach by Grab, Luchsinger. Add the VtxFitterDriver from the sandbox to get an idea of the current status	
org.lcsim.contrib.JanStrube.zvtop	Jan Strube	incomplete		ZVTop implementation, taking advantage of the new Track interface, alpha quality	
org.lcsim.contrib.KFFitter	Fred Blanc	?		Kalman Filter Fitter	
org.lcsim.contrib.LeiXia	Lei Xia	?		PFA analysis	
org.lcsim.contrib.NickSinev.tracking.wmfitter	Nick Sinev	?		SLD Weight matrix fitter	
org.lcsim.contrib.NickSinev.ztracking	Mike Ronan+Nick Sinev?	?		Track cheater?	
org.lcsim.contrib.onoprien.mcTrackFinder	D. Onoprienko	complete		Configurable cheater track finder and related utilities.	
org.lcsim.contrib.onoprien.testers	D. Onoprienko	functional, under development		Track finder performance testing suite	
org.lcsim.contrib.SODTracker	Fred Blanc	?		Silicon Outer Detector (SOD) Tracker	
org.lcsim.contrib.SiStripSim	Tim Nelson	?		Silicon Strip Simulation (moving soon to org.lcsim.detector)	
org.lcsim.contrib.SteveMagill	Steve Magill	?		PFA Analysis example	
org.lcsim.contrib.niu	V.Zutshi, G.Lima	functional, under development	Talk at Calor'06	Template-style implementation of PFA developed at NIU	
org.lcsim.contrib.proulx	?	?		?	
org.lcsim.contrib.seedtracker	Richard Partridge	?		Tracking algorithm based on forming track seeds from all 3-hit combinations	
org.lcsim.contrib.subdetector.tracker.silicon	Tim Nelson	?		Experimental geometry package (Developed further in Geomconverter as org.lcsim.detector by Jeremy)	
org.lcsim.contrib.tracking	Tim Nelson	?		Outer-tracker-only track finding	
org.lcsim.contrib.uiowa	Mat Charles	unstable		Template-style PFA implementation (NonTrivialPFA)	?

Production

Package	Author	State	Docs/Talks	Description
org.lcsim.digisim	Guilherme Lima	Stable	Documentation	Calorimetry digitization simulator
org.lcsim.mc.CCDSim	Nick Sinev	?		CCD digitization
org.lcsim.mc.fast	Many	?		Fast MC package, including tracking, calorimetry
org.lcsim.recon.cat	D. Onoprienko E. von Toerne	functional, under development		Calorimeter Assisted Track Finder
org.lcsim.recon.cheater	Mike Ronan	?	confluence	Recon cheater
org.lcsim.recon.cluster.analysis	Ron Cassell	?		Generic cluster performance analysis
org.lcsim.recon.cluster.cheat	Ron Cassell	?		Cluster cheater
org.lcsim.recon.cluster.clumpfinder	Mat Charles	?		finds dense clumps within clusters
org.lcsim.recon.cluster.directedtree	G.Lima, V.Zutshi	stable	Talk at Boulder ILCSim workshop	Directed tree cluster finder
org.lcsim.recon.cluster.fixedcone	Norman Graf	?		Cluster finder
org.lcsim.recon.cluster.mipfinder	Wolfgang Mader, Mat Charles	stable		MIP finding
org.lcsim.recon.cluster.mst	Mat Charles	stable		Minimal spanning tree cluster finder
org.lcsim.recon.cluster.nn	Norman Graf	?		Nearest neighbor cluster finder

org.lcsim.recon.cluster.structural	Mat Charles	stable		Specialized clusterer for hadronic showers
org.lcsim.recon.emid.hmatrix	Norm Graf	?		HMatrix package
org.lcsim.recon.ganging	Ron Cassell	?		Allows virtual ganging of calorimeter hits
org.lcsim.recon.muon	C. Milstene	?		Muon finding
org.lcsim.recon.particle	Ron Cassell	?		Perfect PFA
org.lcsim.recon.pfa.cheat	Mat Charles	functional		Cheating tools for PFA
org.lcsim.recon.pfa.identifier	Mat Charles	functional		Turn more primitive objects (clusters, tracks, etc) into ReconstructedParticles
org.lcsim.recon.pfa.output	Mat Charles	?		Modules to produce standard plots for PFAs
org.lcsim.recon.pfa.structural	Mat Charles	?	incomplete	Iowa PFA implementation (when stable) and associated tools
org.lcsim.recon.tracking.cheat	Ron Cassell	?		Track Cheater
org.lcsim.recon.tracking.ftf	?	?		?
org.lcsim.recon.tracking.trf	Norm Graf	?		TRF track finder + fitter
org.lcsim.recon.vertexing.billoir	Norman Graf, (Jan Strube)	incomplete		vertex fitting based on Billoir's method. Needs testing
org.lcsim.recon.vertexing.zvtop4	Jan Strube	incomplete		Vertex finding/fitting, awaiting completion of a vertex fitter
org.lcsim.recon.ztracking	M. Ronan	?		Track cheater