

RICHEngine

initRICEvent
clear RICH banks
Connect to CCDB

ProcessDataEvent

RICHPMTReconstruction

- processRawData
 - readRawBank
 - readRawEdgesHIPO
 - selectEdges
 - reconstructHits
 - findClusters
 - selectGoodClusters
 - findXTalk
 - write RICH::Hits
 - write RICH:Clusters

RICHEdge

deal with raw TDC

RICHHit

define geometry and time

RICHCluster

define centroid

RICHEventBuilder

- create RICHevent
- processDCData
 - readForwardTracks
 - readCherenkovResponse
 - process_DC-RICH_Match
 - write REC::RICH
- processRICHData
 - find_Rich_Particles
- find_Analytic solution
- find Ray-traced solution
 - write RICH::Hadrons
 - write RICH::Photons

RICHEvent

- throw_photons
 - RayTrace
- associate_throws
- trace_photons
 - RayTrace
- get_pid
 - pid_probability

RICHParticle

hadron or photon

RICHSolution

store the single photon infos

RICHio

deal with hipo tables

RICHTool

define geometry
define ray-tracing
find_intersection¹
OpticalRotation

RICHComponent

store optical infos
store CSG info

RICHLayer

define tracking planes

RICHPixel

pixel geometry, too detailed

RICHConstants

define default values of parameters

RICHRay

extension of Line3D

RICHFrame

axis and origin of local reference systems

RICHIntersection

store infos at optical boundary
ref index, normals, components

Quaternion

rotation utility

¹ intersection_with_faces in Shape3D

² getCenter and getRadius in Sphere3D