

Pattern Recognition

The pattern recognition code is designed to associate hits in one or more detector to a single track.

Pattern recognition in 2D (r-z plane) in the VELO detector for L1 trigger, HLT trigger and offline

- VeloRTracking

Pattern recognition in 3D, starting from 2D tracks, in the VELO detector for L1 trigger, HLT trigger and offline

- VeloSpaceTracking

Pattern recognition on remaining clusters by creation of 3D points and tracking without assumptions about track directions

- VeloGeneralTracking

Pattern recognition on the VELO when the detector is open

- VeloOpenTracking

Pattern recognition producing very clean track sample, most useful for making tracks for alignment and test beam reconstruction

- VeloGenericTracking

The pattern recognition provides an estimate of the trajectory of the track and the covariance matrix, but does not attempt to do an accurate fit. A later fit is done using the Kalman filter after all hits have been associated to the track, which does attempt to get the best possible track parameters.

Monitoring of Pattern Recognition

In the default Brunel options, the PatChecker algorithm is run from the PatChecker package.

Talks on pattern recognition

* Retune of VELO pattern recognition 4th April 2005 [↗](#)

LHCb notes on pattern recognition

- Refer to the list on the main tracking page.

-- DavidHutchcroft - 09 Aug 2005

This topic: LHCb > LHCbPatternRecognition

Topic revision: r8 - 2007-08-30 - DavidHutchcroft



Copyright &© 2008-2019 by the contributing authors. All material on this collaboration platform is the property of the contributing authors.

Ideas, requests, problems regarding TWiki? Send feedback