

Framework Requirements: Reconstruction

- Modular
 - each step should be replaceable
 - clear documentation of needed data
- Ideas for these modules
 - DataCorrector: subtract pedestals, apply gain calibration, etc.
 - PulseFinder: detect signal in corrected data and calculated time information and integrated charge
 - PulsetoHit: combines the pulses to hits (space points)
 - TrackFinder: combines the pulses to tracks
 - TrackAnalyser: do the real fit to the data and calculate data for further analysis (e.g. residuals)

Requirements: Reconstruction

- Analyser:
 - different fit methods
 - same output for further analysis:
 - track parameter
 - residuals (with and without hit)
 - probability (Chi2)
 - fit status
- Event Display
 - needed for eye scan of data and test of methods (during development)
 - display all available data

Requirements: Analysis

- Resolution
 - vs. drift length
 - angle dependency
- 'dE/dx'
- extract condition data
 - drift velocity
 - diffusion
 - gain
- Control Plots
 - efficiencies
 - pulse shape for every pads (to detect damaged pads)
 - detector acceptance

Short Comings of Current Software

- no easy exchange of data and methods
- confusion in definitions of coordinate system
- difficulties in comparison of results
- handling of
 - condition data
 - cut applied