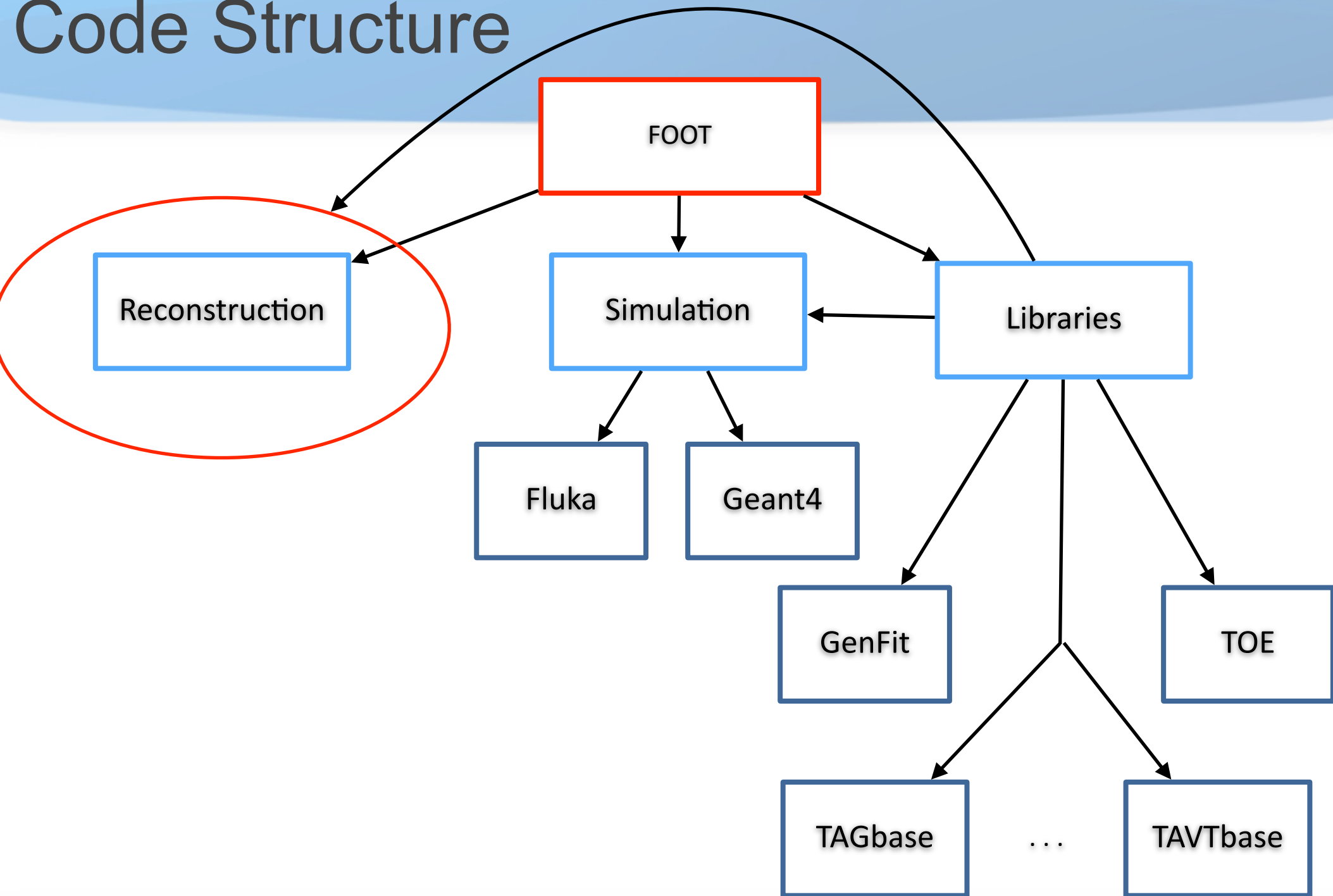


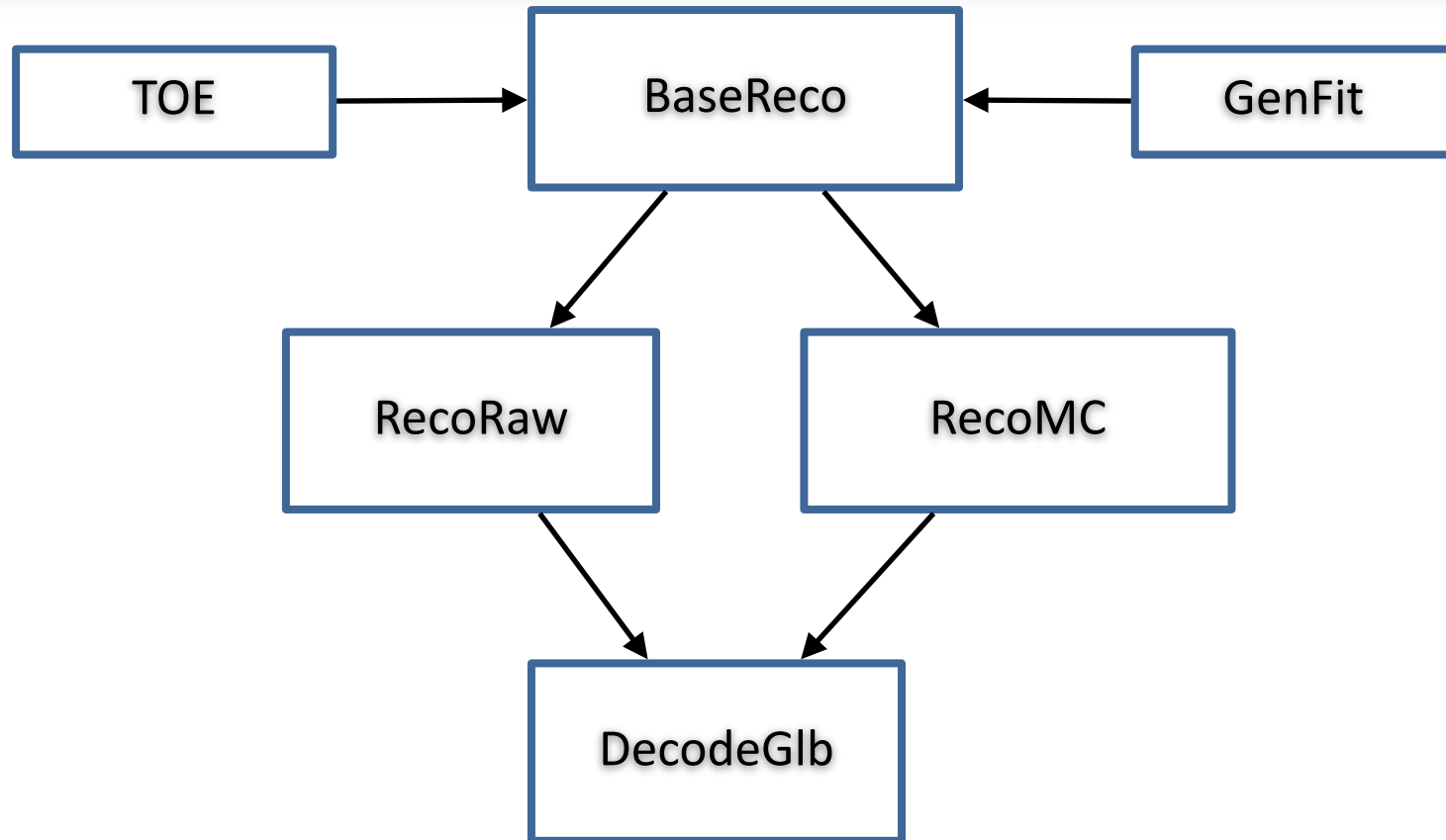
Code Structure



Reconstruction

Local/Global reconstruction

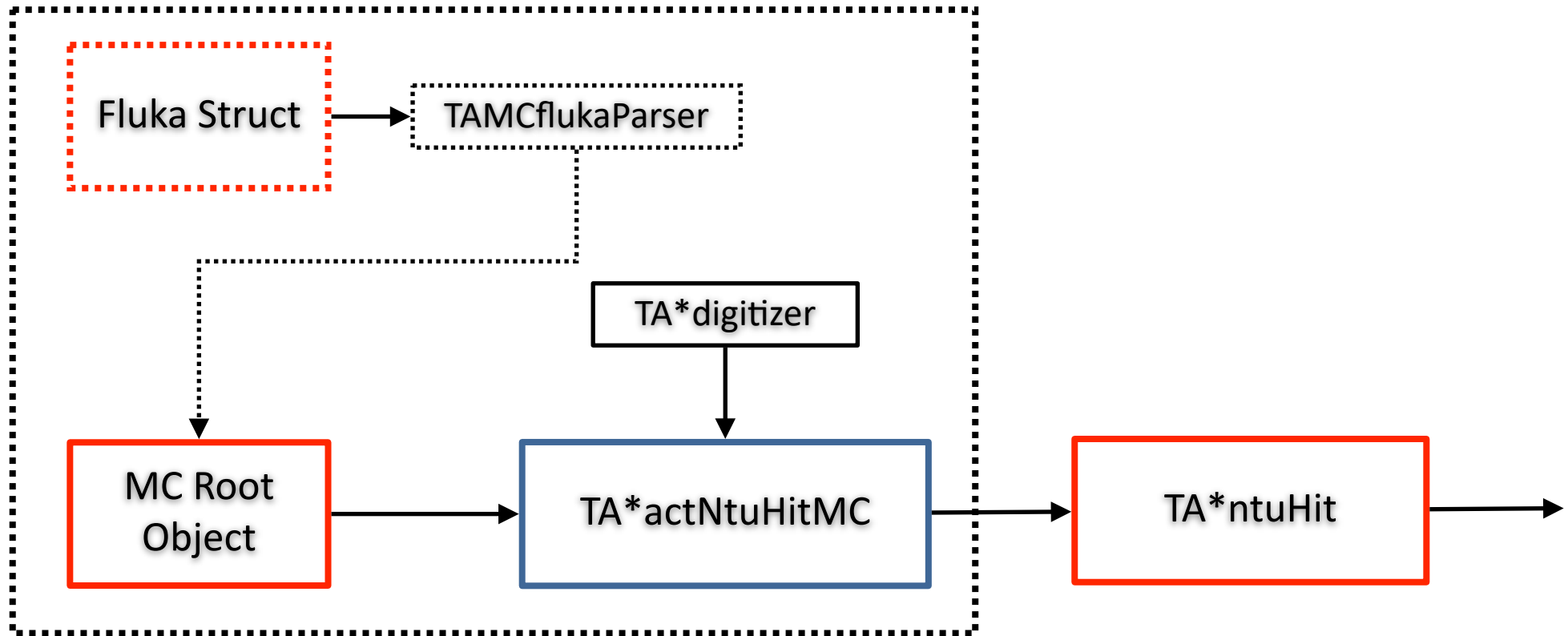
• Scheme:



- Actions common to MC and real data (clusters, points, tracks and vertexes)
- Dedicated classes for actions MC, real data and global reconstruction
- DecodeGlb are available as compiled executable

Raw MC reconstruction

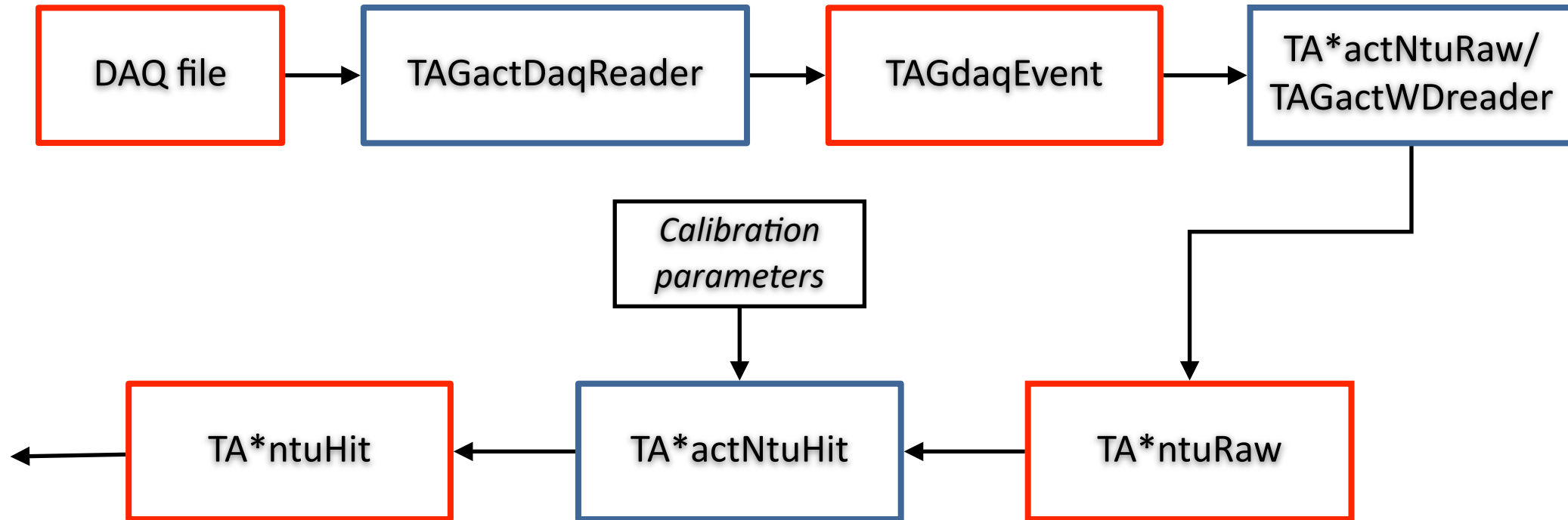
• Scheme:



- TA*actNtuHitMC actions read back either Fluka structure or Ntupled root object

Raw data reconstruction

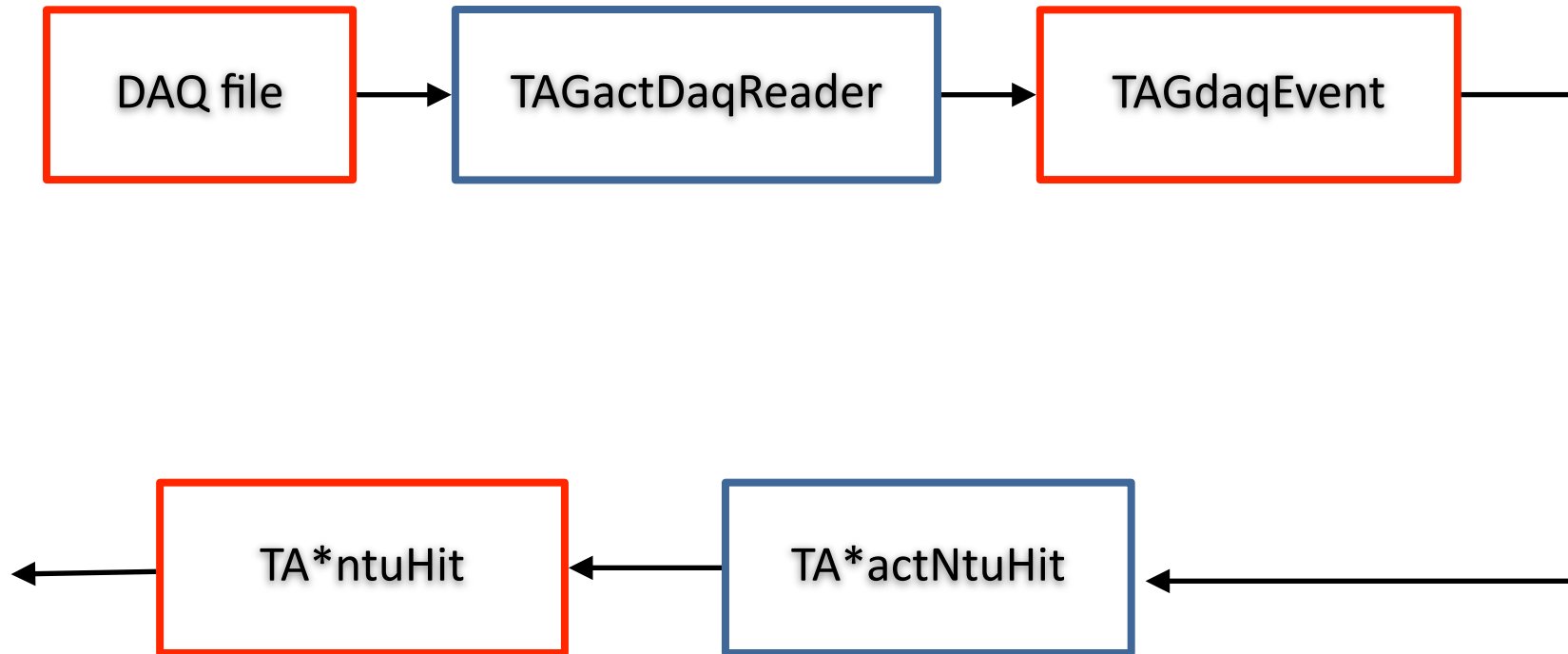
• Scheme with calibration:



- TAGactDaqReader: interface with DAQ in TAGdaq folder
- To pack/unpack DAQ event provided by DAQ and put in TAGdaqApi
- TAGactNtuRaw actions and TAGntuRaw containers dedicated for each detector
- For WD, TAGactWDreader (TW and CA) dedicated class

Raw data reconstruction

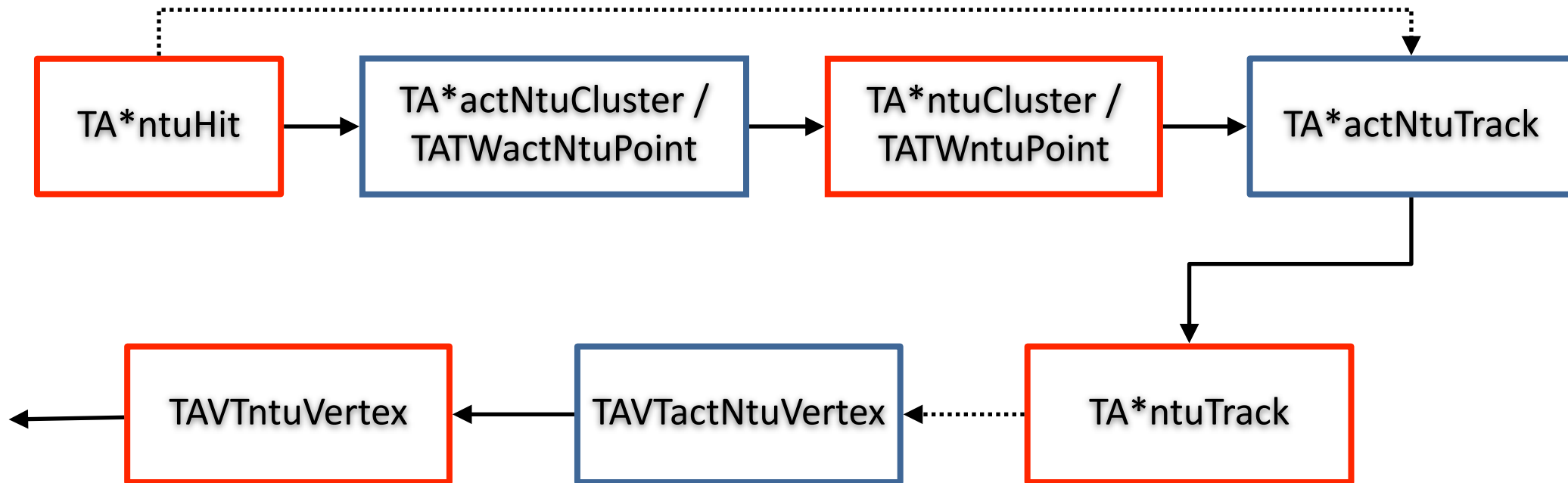
• Scheme w/o calibration:



- TAGactDaqReader: interface with DAQ in TAGdaq folder
- To pack/unpack DAQ event provided by DAQ and put in TAGdaqApi
- TA*actNtuHit actions and TA*ntuHit containers dedicated for each detector

Reconstruction

• Scheme:



- Hits: STC - BM - VTX - ITR - MSD - TW - CAL
 - Clusters/Points: VTX - ITR - MSD - CAL / TW
 - Tracks: BM - VTX - (ITR) - (MSD)
 - Vertex: VTX
- ➔ All positions are given in the detector's framework !

STC Reconstruction

• Scheme:

TASTntuHit

- Hits

BM Reconstruction

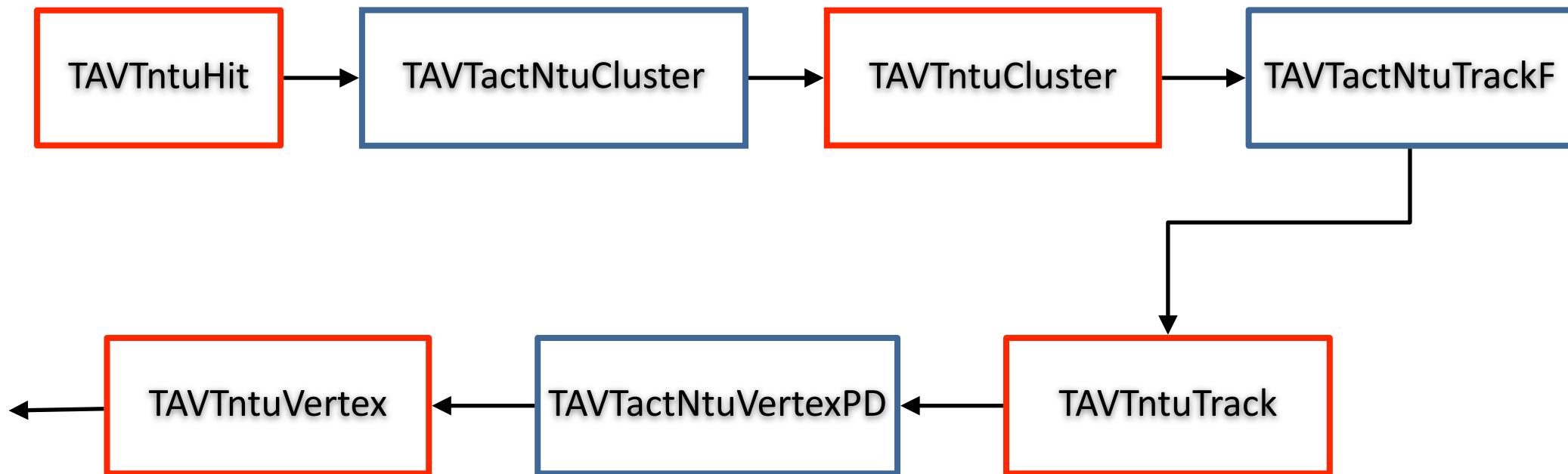
• Scheme:



- Hits - Tracks

VTX Reconstruction

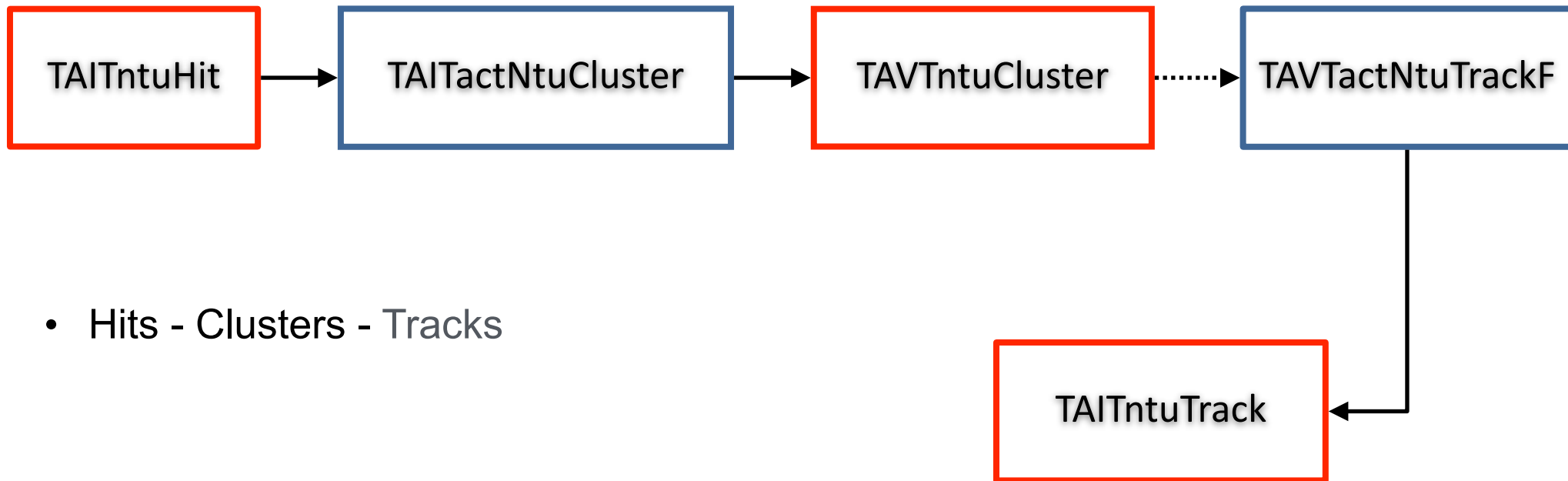
• Scheme:



- Hits - Clusters - Tracks - Vertex

ITR Reconstruction

• Scheme:

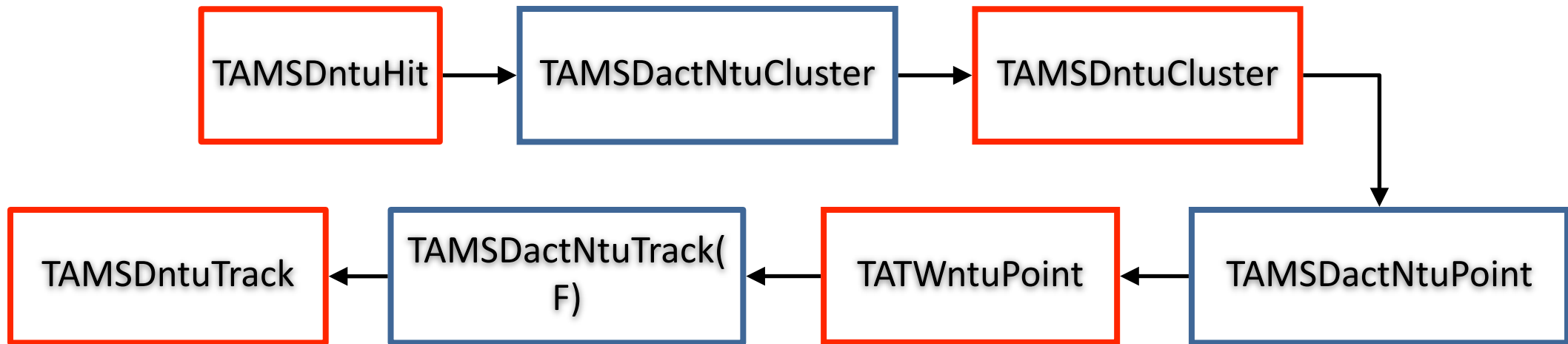


- Hits - Clusters - Tracks

➡ Tracks enable only when no magnetic field

MSD Reconstruction

• Scheme:

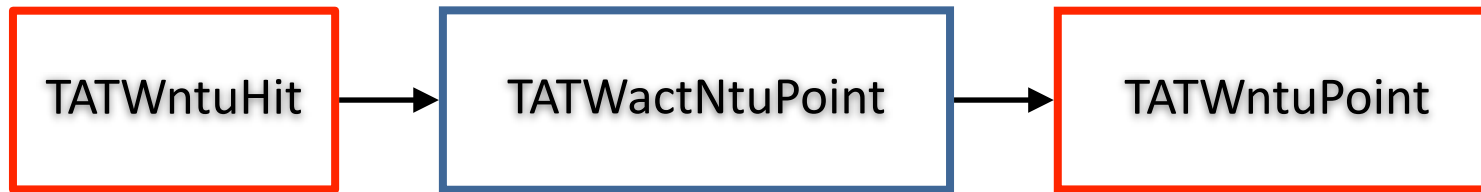


- Hits - Clusters - Points - Tracks

➡ Tracking in standard reconstruction not activated

TOF Reconstruction

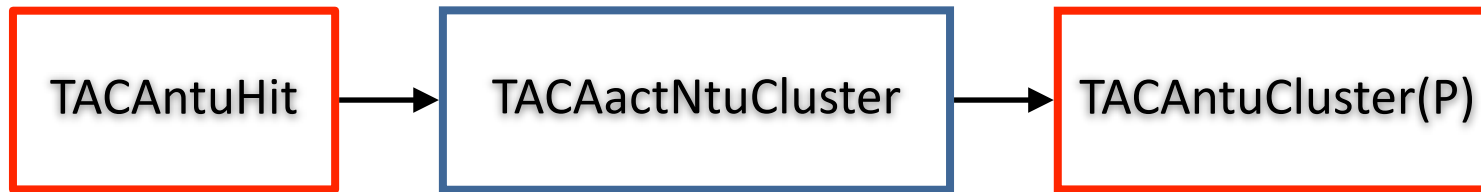
• Scheme:



- Hits - Points

CAL Reconstruction

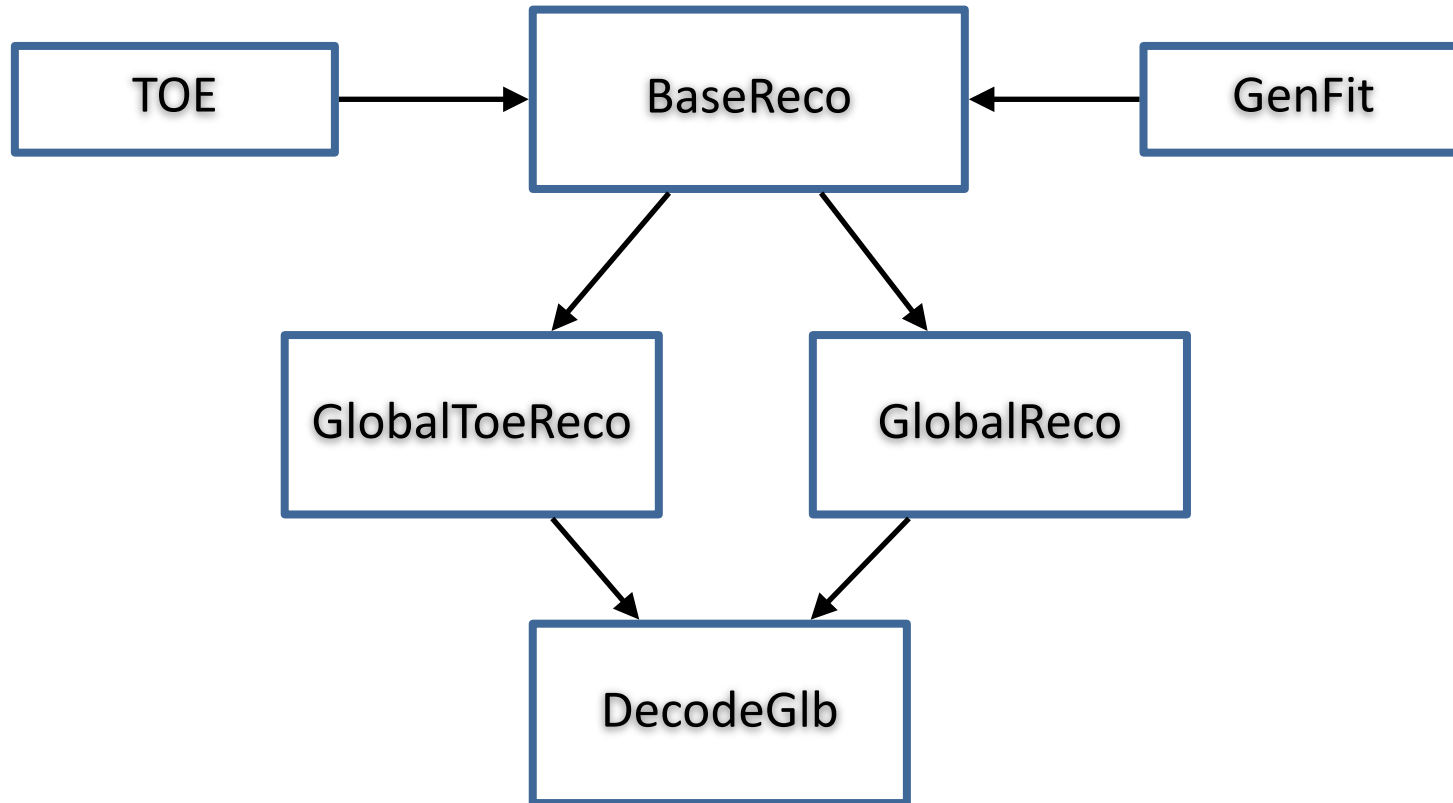
• Scheme:



- Hits - Clusters

Global reconstruction from L0 tree

• Scheme:



- Since the L0 reconstruction actions are common, glb reconstruction inherits from base
- GlobalToeReco: global reconstruction with TOE libraries
- GlobalReco: global reconstruction with GenFit libraries

End