

Overview of software activities

Ch. Finck & M. Toppi

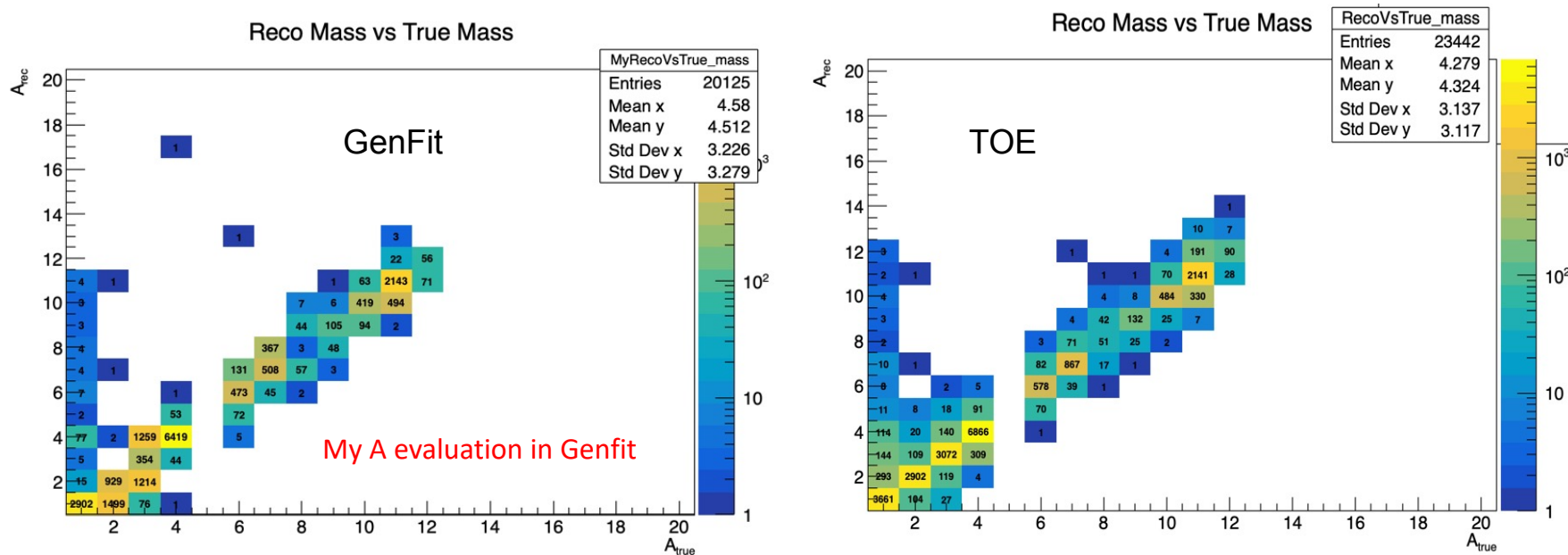
XII FOOT Collaboration Meeting



The last months..

→ .. have been “still” busy ...

- Global reconstruction either with TOE or GenFit
(or *TAGactNtuGlbTrackS* action)



© Giuseppe

- Many bug fixes and code improvements

Status (i)

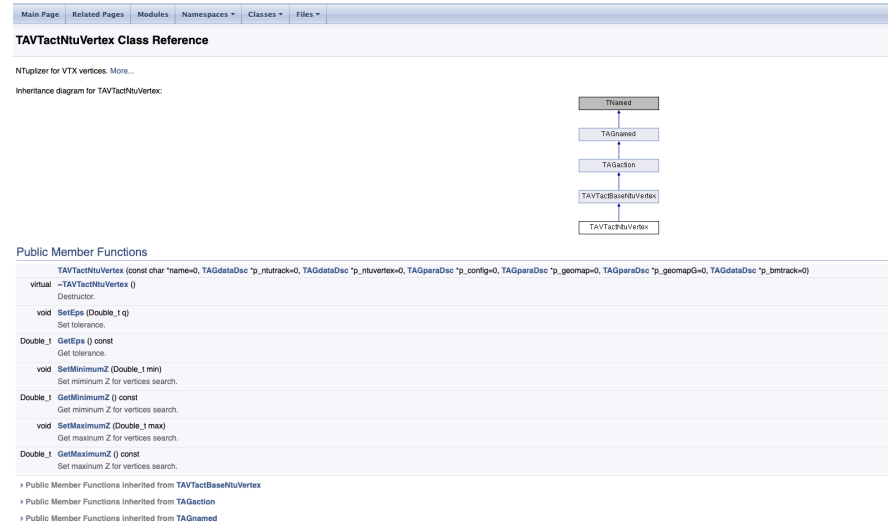
➔ We are near the Goal:

- All detectors are in shoe with all the interfaces
- Global framework can be used regardless the methods
- The development on the detector side
 - still need to compute calibration parameters for some campaigns (e.g.: TW for GSI2021)
 - still no “real” alignment for some detectors (e.g.: MSD for GSI2021)
 - still need improvements in some algorithms (e.g.: CAL clustering)
- Still no global alignment strategy (see last talk)

Status (ii)

- ➔ Oxygen documentation ongoing, server hosted in Roma (ST, MSD, TW and CAL, not yet done)

SHOE documentation



Detailed Description

NTuplizer for VTX vertices.

Constructor & Destructor Documentation

• TAVTactNtuVertex()

```
TAVTactNtuVertex::TAVTactNtuVertex ( const char * name = 0,
                                     TAGdataDesc * pNtuTrack = 0,
                                     TAGdataDesc * pNtuVertex = 0,
                                     TAGparaDesc * pConfig = 0,
                                     TAGparaDesc * pGeoMap = 0,
                                     TAGparaDesc * pGeoMapG = 0,
                                     TAGdataDesc * pBmTrack = 0
                                   )
```

Default constructor.

Parameters

[in]	name	action name
[in]	pNtuTrack	track container descriptor
[out]	pNtuVertex	vertex container descriptor
[in]	pConfig	configuration parameter descriptor
[in]	pGeoMap	geometry parameter descriptor
[in]	pGeoMapG	target geometry parameter descriptor
[in]	pBmTrack	input BM track container descriptor

- ➔ Ready for global analysis mainly assess by MC data
- ➔ Ready for GSI2021 analysis, but ...
 - still needing alignment for MSD (and dead map)
 - still needing the calibration for TW

'final' considerations

Global Reconstruction is now available:

- ➔ Please use the latest version (master or newgeom) for reconstruction:
 - Helping a lot for debugging and make the code more stable (many thanks to Yun, Giuseppe, Roberto Z.... who are our Beta testers)
- ➔ Please push your changes in the newgeom branch to make them available for everybody
- ➔ Avoid standalone executable (outside the framework) does not ease the integration in shoe

Pb of recurrent man power

What's ahead of us..

➔ Improve documentation:

- We still need to update the twiki page
 - <http://arpg-serv.ing2.uniroma1.it/twiki/bin/view/Main/FOOTSoftware>
- We still need to update the Doxygen documentation
 - <http://arpg-serv.ing2.uniroma1.it/FOOTshoe/shoe/html/index.html>

➔ Analyse GSI2021 data:

- still pending issues

➔ Prepare HIT2022 data taking

- Define the minimal expected setup for physics run (w or w/o trackers)
- Define MC simulations accordingly
- Dedicated session at the end of the meeting



Thanks for your attention