Status of software activities

A. Sarti

Branch status

➡ Master & NewGeom branch

– aligned with most of the different branches (Calo, BM)

– only misses

- latest developments in the global reco (NewGeom)
- TW development (ongoing, will be finalised before the weekend)
- inclusion of analysis routines (from Spighi/Colombi, ongoing)

– Compiles/runs on laptops and on tier3

➡ Wiki pages have been updated with the instructions.

➡ The documentation part is being improved: instructions on how to run and on how to use the campaign manager will be provided as soon as we reach a consensus…

Campaign Manager

➡ We have several places in which we need to know the 'conditions' of the data we are going to 'handle'

- – Data reconstruction (level0, global)
- – MC generation (Makegeo)
- – MC reconstruction (level0, global)
- – Global analysis (to be ported in shoe soon)

➡ What we need to 'version'?

- – Detector conditions
- – Target/beam/MC conditions

➡ The software needs to know whether we are processing data or MC, which beam, which nominal energy, which target, which detector condition… And there should be an easy way to 'load' a proper **consistent** configuration

A proposal..

➡ An attempt for doing so, based on ascii files, has been developed within the NewGeom branch [**details in the next presentation**]

Structure: ./cammaps/FOOT_cam.map

```
// List of Campaigns
CamNumber:    0
CamName:      ""
CamForceSync: 0
CamDataMC:    1
CamDate:      ""
CamSum: "Test using standard input files"

CamNumber:    1
CamName:     "GSI"
CamForceSync: 1
CamDataMC:    0
CamDate: "5-8 April 2019"
CamSum: "Test experiment with ST+BM+VTX+TW…"

CamNumber:    2
CamName:    "HE_MC"
CamForceSync: 0
CamDataMC:    1
CamDate: "5-8 January 2020"
CamSum: "MC data for HE reaction produced by FLUKA"
```

- Campaign name with associated id
- Force sync flag*
- MC data flag
- Date of data taking or production
- Summary of the campaign

   * Force sync btw detectors present
   in FootGlobal.par and campaign
   file (campaign is master)

➡ e.g.: load campaign file in ./cammaps/GSI.cam when option -exp GSI

Final goal

➡ The user only needs to know/specify:

- – Which data/MC sample he wants to process
- – Which run

➡ The campaign manager should take care of all the rest:

- – Checking if all the needed files are present and return an error if anything is missing (several detectors have not yet fully checked against the used of 'standard' files in 'master' folders not having specified the corresponding copies _if needed_ in the 'exp' folders'). We do not want that the user loads some 'predefined file' that is existing (by chance) but with wrong information
- – Print the configuration that is being used for a check in the log

➡ The detector experts need to carefully review the files that are used in shoe and understand what needs to be versioned and what will remain as default. <u>All the needed files should be provided for all the campaigns: this is a detector expert duty</u>.