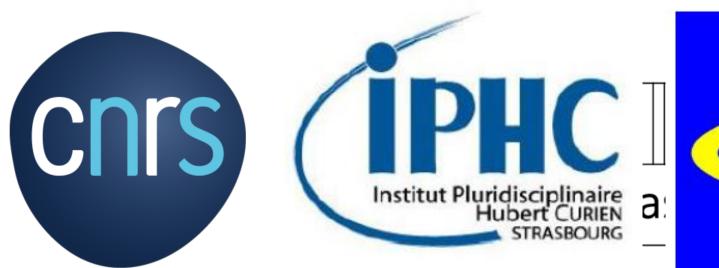


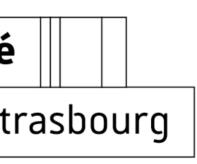
Overview of software activities

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Belle II





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- ➡.. have been "still" busy …
- Many bug fixes and code improvements:
- Update run file for CNAO2023
- New analysis framework
- Adding passive material (VTX+ITR+MSD)
- New interface for python (instead of C++ macros)



New root geometry framework (TAGgeometryConstructor: interfaced with Event Display and GenFit)

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Status (i)

→ We are near the Goal:

- All detectors are in shoe with all the interfaces (finally)
- The developments on the detector side
 - Calibration ongoing for CAL •
 - Eta function study ongoing for MSD •
- Data taking of CNAO2023:
 - Calibration on-going BM, VT, IT, etc... •
 - Geometry survey/debugging
 - Updated simulation parameters
 - Alignment of BM, VT, MSD and TW (IT and DI not completed)



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Status (ii)

Doxygen documentation ongoing, server hosted in Roma (ST, MSD, CA not done) Update doc automatically from master branch to baltig <u>site</u> Possibility to add the documentation directly in git under study

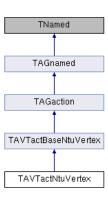
SHOE documentation

Main Page Related Pages Modules Namespaces - Classes - Files -

TAVTactNtuVertex Class Reference

NTuplizer for VTX vertices. More

Inheritance diagram for TAVTactNtuVertex



Public Member Functions

	TAVTactNtuVertex (const char *name=0, TAGdataDsc *p_ntutrack=0, TAGdataDsc *p_ntuvertex=0, TAGparaDsc *p_config=0, TAGparaDsc *p_geomap=0, TAGparaDsc *p_geomapG=0, TAGdataDsc *p_
virtual	~TAVTactNtuVertex () Destructor.
void	SetEps (Double_t q) Set tolerance.
Double_t	GetEps () const Get tolerance.
void	SetMinimumZ (Double_t min) Set miminum Z for vertices search.
Double_t	GetMinimumZ () const Get miminum Z for vertices search.
void	SetMaximumZ (Double_t max) Get maxinum Z for vertices search.
Double_t	GetMaximumZ () const Set maximum Z for vertices search.
Public	Member Functions inherited from TAVTactBaseNtuVertex

- Public Member Functions inherited from TAGaction
- Public Member Functions inherited from TAGnamed

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Detailed Description

NTuplizer for VTX vertices.

Constructor & Destructor Documentation

TAVTactNtuVertex()
TAVTactNtuVertex::TAVTactNtuVertex (const char * name = 0,
TAGdataDsc * pNtuTrack = 0,
TAGdataDsc * pNtuVertex = 0,
TAGparaDsc * pConfig = 0,
TAGparaDsc * pGeoMap = 0,
TAGparaDsc * pGeoMapG = 0,
TAGdataDsc * pBmTrack = 0
)

Default constructor

Parameters

- [in] name action name
- [in] pNtuTrack track container descripto
- tuVertex vertex container descriptor
- configuration parameter descriptor
- [in] pGeoMap geometry parameter descripto
- [in] pGeoMapG target geometry parameter descripto
- [in] pBmTrack input BM track container descriptor

Status (iii)

- Twiki server hosted in Roma (not available anymore)
- Migration and update of the twiki directly on git
 - <u>https://baltig.infn.it/asarti/shoe/-/wikis/</u>
 - Possibility for all the shoe developers to modify and update the twiki (how to do it)

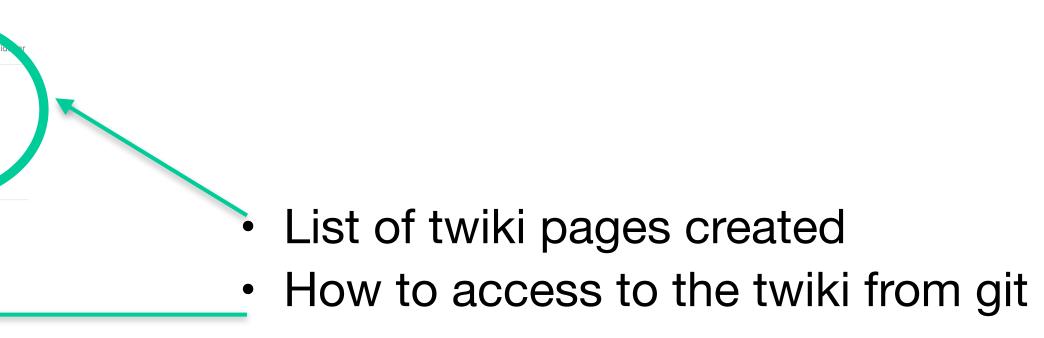
 - The old twiki page is maintained at least until the end of the migration/update

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Q Search or go to.		Last edited by 🎇 Yunsheng Dong 1 hour ago	FOOTDevelopers
oject		Home	FOOTReconstructio
shoe		CLICE (Cofficients for Lindranth arous Ontimization Even arise ant). The EOOT activises	FOOTSimulation
Pinned	>	SHOE (Software for Hadrontherapy Optimization Experiment) - The FOOT software page	FOOTSoftwareTask
3 Manage	>		
] Plan	~	%TOC%	
Issues	0		
Issue boards		Tasks & Organization	
Milestones			
Wiki		Here you can find the full list and description of the software tasks.	
Code			
7 Build	>		
) Secure	>	Getting started with the FOOT software	
j Deploy	>	SHOE is made available to users through the git INFN server.	
Operate	>	The SHOE software is formed by Simulation code and a Reconstruction code.	
Monitor	>	The software is organized in folders.	
1 Analyze	>	·	
Settings	>	 G4Simulation: contains everything is needed to run the simulation with Geant4. Details can be found in the Simulation page. Simulation folder: contains everything is needed to run the simulation with FLUKA. Details can be found in the Simulation page. libs folder: contains the framework and all the classes needed to handle the reconstruction of all the subdetectors, the event display and the global event reconstruction. Reconstruction folder: contains the executables and macros to run the events reconstruction. 	
		Before downloading the software you have to:	
		• register on the git lab portal (baltig).	

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• As for the doxygen documentation, the baltig/git server is more stable than the server in Rome



Local/Global Reconstruction is available: Please using the latest version (master or newgeom) for reconstruction (N.B.: The configuration/calibration/geometrical parameter files for CNAO2023 campaign are available only in newgeom)

Please push your changes in the newgeom branch to make them available for everybody and advertise the collaboration about relevant changes

Pb of recurrent man power, need at least one guy per detector Calibration/alignment done by the core team !

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- Improve documentation:
 - Update the twiki page, now all the shoe developers can do it
 - We still need to update the Doxygen documentation
 - Possibility to export the documentation directly on git under study _
 - http://arpg-serv.ing2.uniroma1.it/FOOTshoe/shoe/html/index.html
- Analyse GSI2021 HIT2022 CNAO2022/23 data:
 - Alignment of detectors ongoing for HIT and CNAO
 - Example in the new analysis available (see next <u>talk</u>)



Thanks for your attention

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