

## Use of ROOT in Geant4

*Tuesday 12 March 2013 17:30 (20 minutes)*

While the Geant4 framework itself is independent from any choice of analysis tool, the Geant4 user developing his own application can include ROOT analysis in several ways. The simplest is use of g4tools integrated directly in Geant4 since 9.5 release that hides the chosen persistency technology to the user, then the application can use directly classes from ROOT package and finally users can use AIDA compliant tools. All these options are demonstrated in the Geant4 examples.

In this presentation we will give an overview of the new analysis module used as bridge for histogramming and storing ntuples and the examples concerning the use of analysis tools. We will also present the use of ROOT in Geant4 testing, including testing on GRID, and finally the experience with ROOT in multi-threaded programs. The issues experienced with usage of ROOT will be also discussed.

### Summary

An overview of the new analysis module in Geant4, the examples concerning the use of analysis tools, the use of ROOT in Geant4 testing and the experience with ROOT in multi-threaded programs will be presented.

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