



Contribution ID: 399

Type: **oral presentation**

JASSimApp plugin for JAS3: Interactive Geant4 GUI

Thursday, September 30, 2004 5:50 PM (20 minutes)

JASSimApp is joint project of SLAC, KEK, and Naruto University to create integrated GUI for Geant4, based on JAS3 framework, with ability to interactively:

- Edit Geant4 geometry, materials, and physics processes
- Control Geant4 execution, local and remote: pass commands and receive output, control event loop
- Access AIDA histograms defined in Geant4
- Show generated Geant4 events in integrated event display

JAS3 is the latest development of JAS, a general-purpose data analysis tool. It employs a highly modular component-based framework and allows flexible and powerful customized plugin modules. JASSimApp is a concrete implementation of its design concept, Geant4 as the problem domain. It is composed of existing interactive tools like : GAG, Gain, Momo, WIRED etc.. A new C++ class of the Geant4 interfaces category was developed to exploit multi-threaded control over Geant4 execution. The plugin modules of JAS3 reused existing classes with little modification.

References:

<http://erpc1.naruto-u.ac.jp/~geant4/index.html> ; <http://jas.freehep.org/jas3> ;
<http://wired.freehep.org> ; <http://wwwasd.web.cern.ch/wwwasd/geant4/geant4.html>

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Session Classification: Event Processing

Track Classification: Track 2 - Event processing