



visualization driver for Geant 4

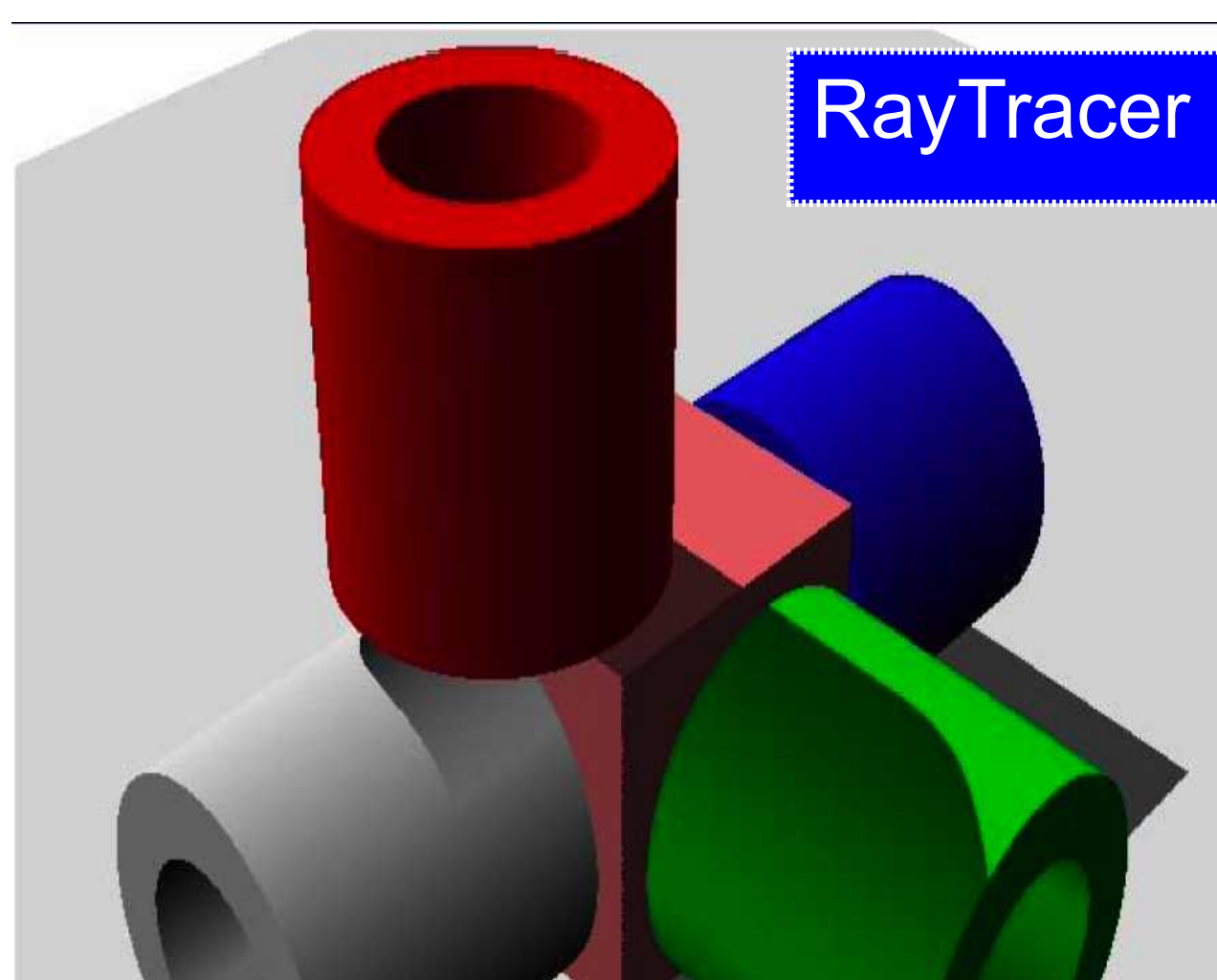
Geant 4 is a toolkit for the simulation of the passage of particles through matter.

Its areas of application include **high energy, nuclear and accelerator physics**, as well as studies in **medical** and **space science**.

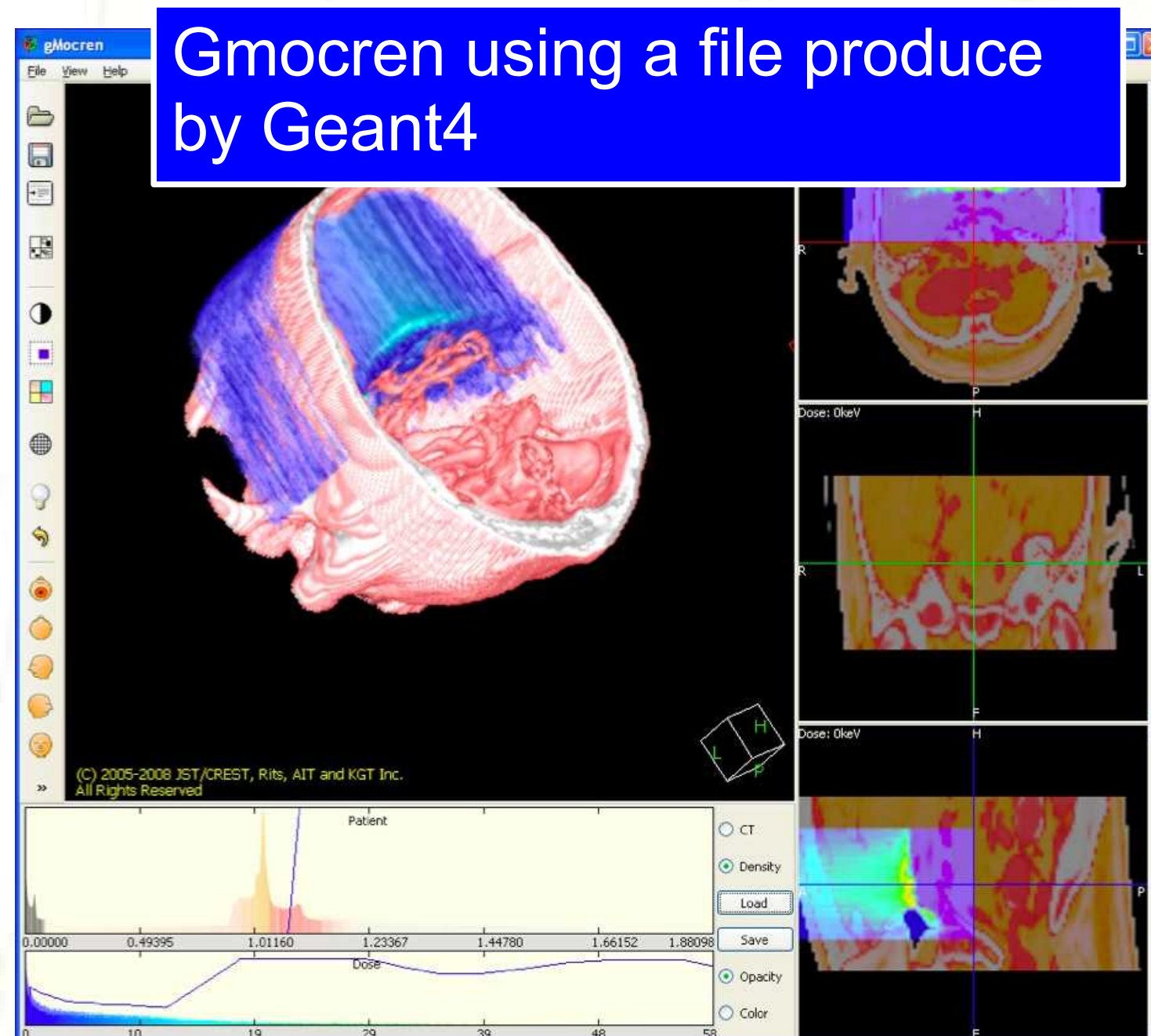
Geant4 provides many different choices of visualization systems. Lot of features depending of each driver :

- Quick response to survey successive events
- Impressive special effects for demonstration
- High-quality output to prepare journal papers
- Flexible camera control for debugging geometry
- Highlighting overlapping of physical volumes
- Interactive picking of visualized objects
- ...

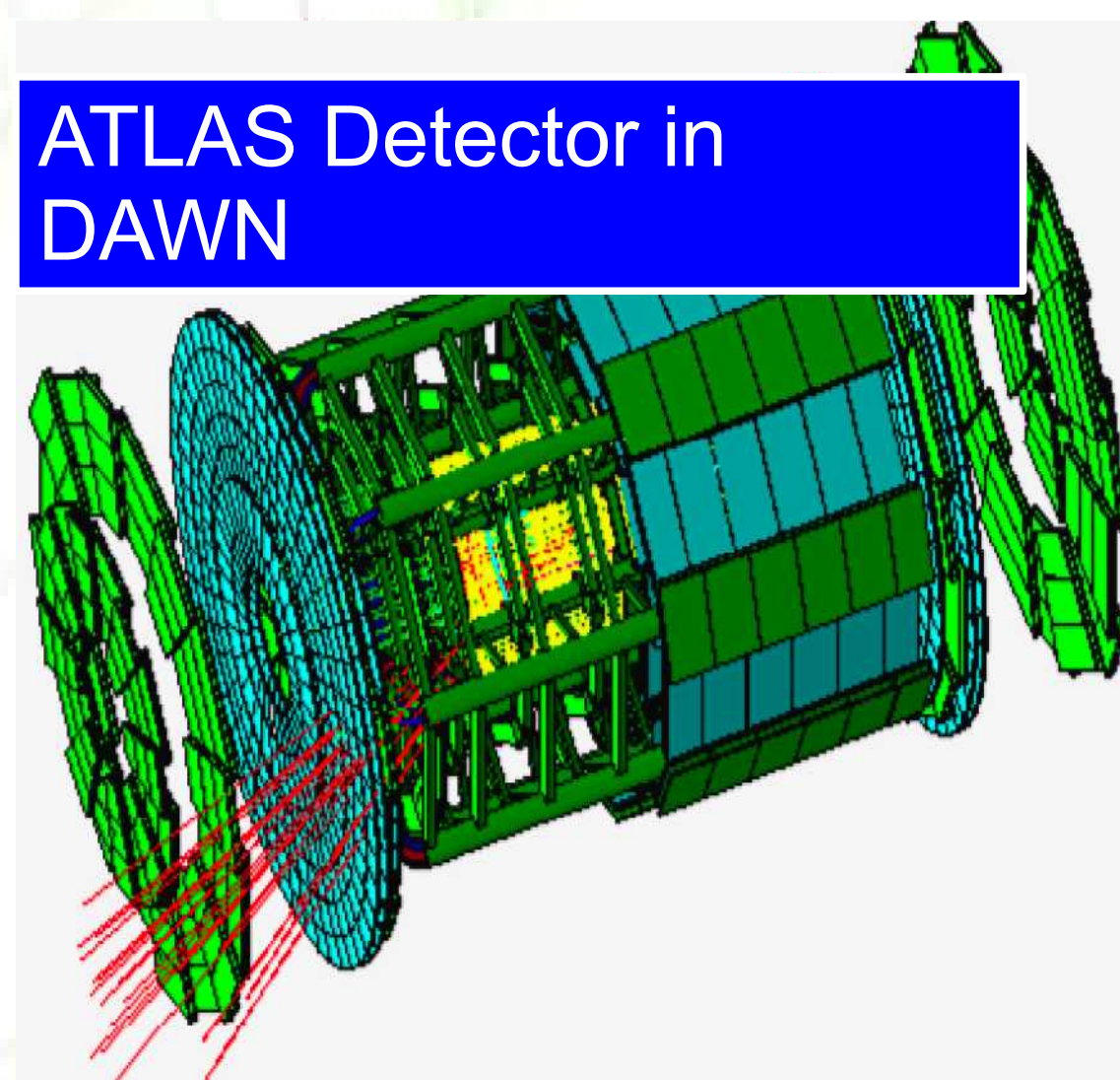
Name	Required	GUI control	Launching commands from Geant4	Hight quality print	Inquire your world
HepRep					
HepRep/HepRApp	✓	✓	WIRED/FRED browser	✗	✓
OpenGL					
OpenGL X	✓	✓ (+ Cygwin)	OpenGL/X11	✓	✗
OpenGL Xm	✓	✓ (+ Cygwin)	OpenGL/X11	✓	✗
OpenGL WIN32	✗	✗	OpenGL/WIN32	✓	✗
OpenGL Qt	✓	✓	OpenGL/Qt	✓	✓ In next release
Others					
Dawn	✓	✓	Fukui Renderer	✗	✗
OpenInventor	✓	✓	OpenGL OpenInventor	✓	✗
VRML	✓	✓	VRML Viewer	✗	✗
RayTracer	✓	✓	JPEG Viewer	✗	✗
ASCIITree	✓	✓	none	✗	✗



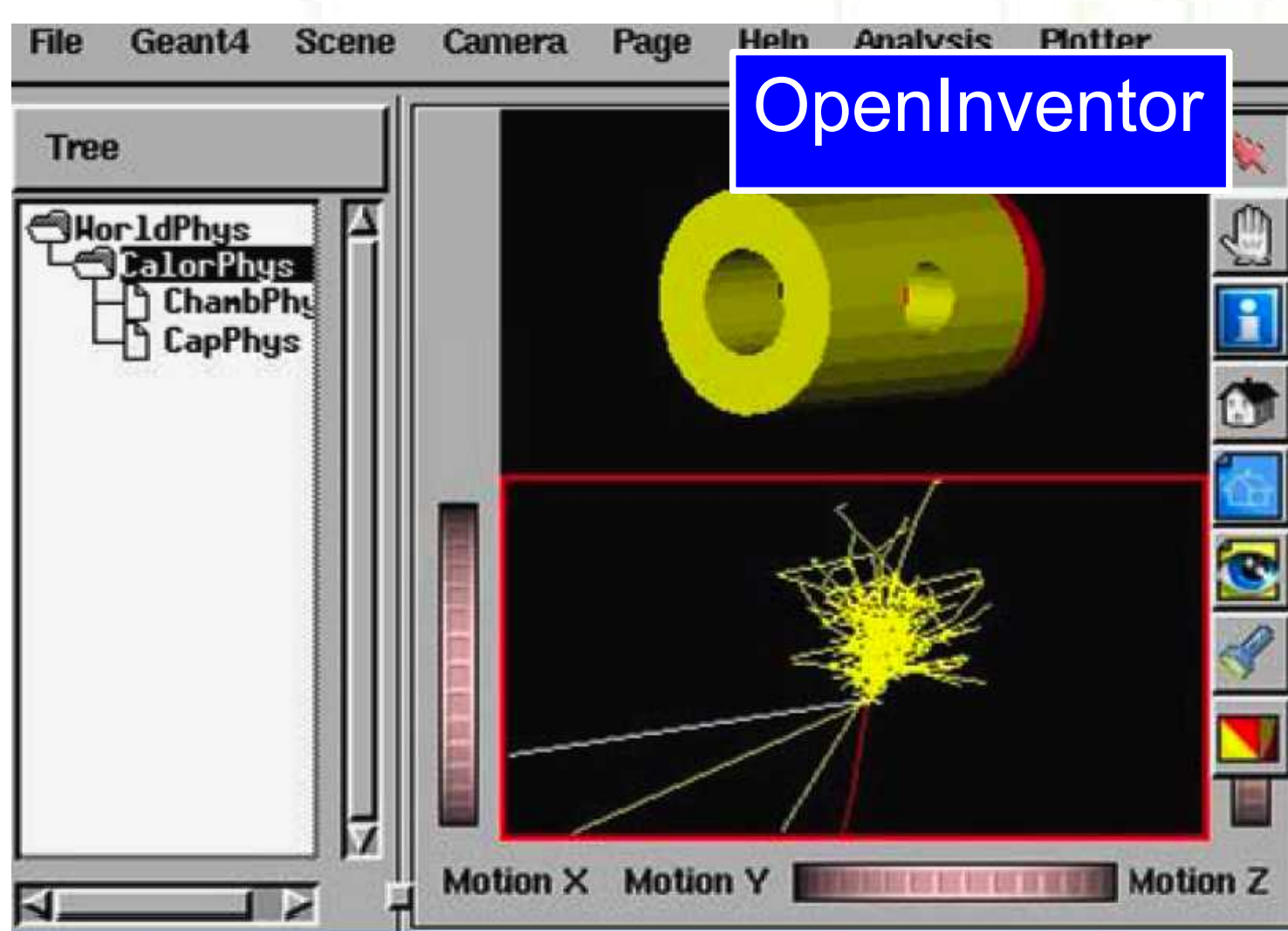
RayTracer



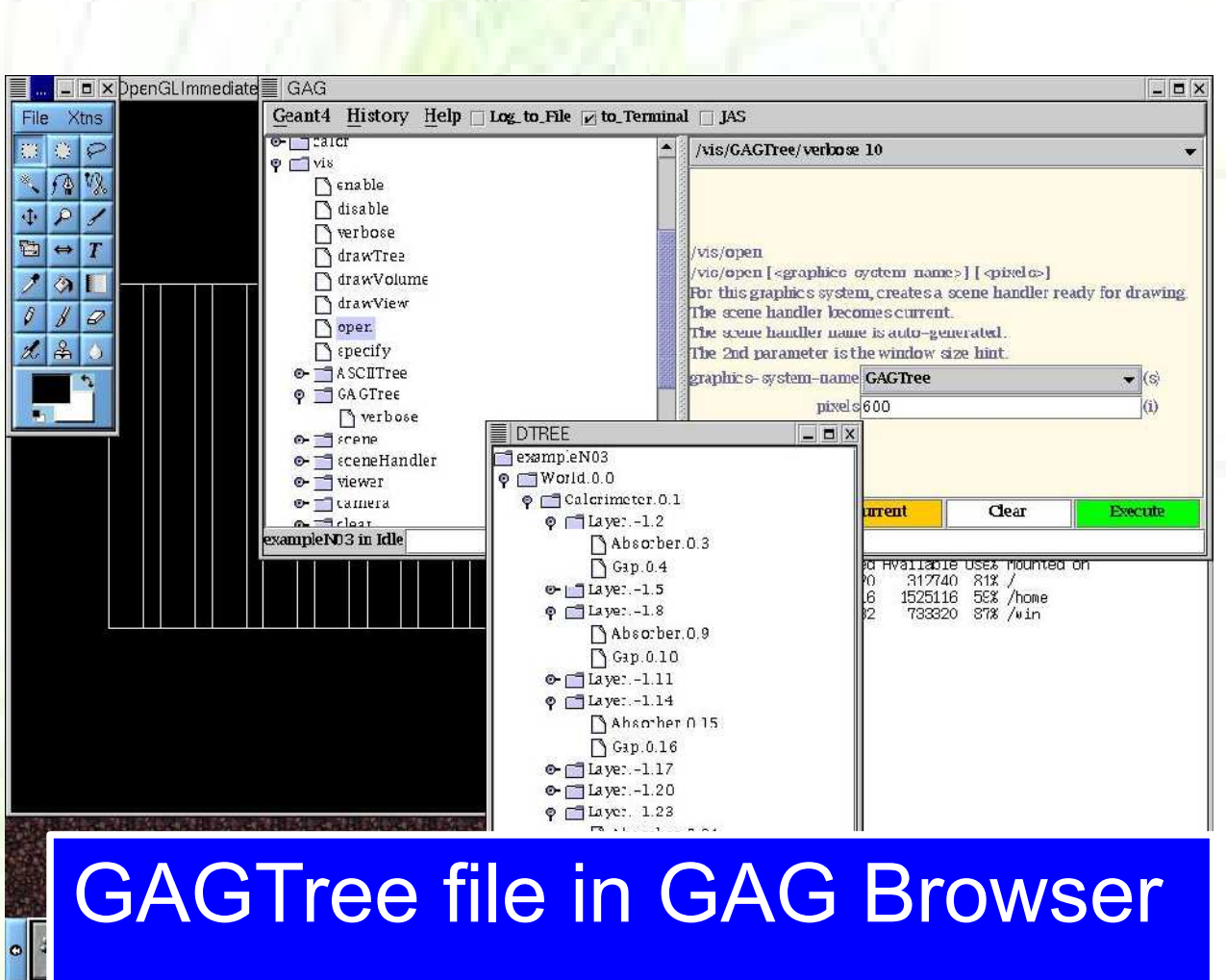
Gmoccra using a file produce by Geant4



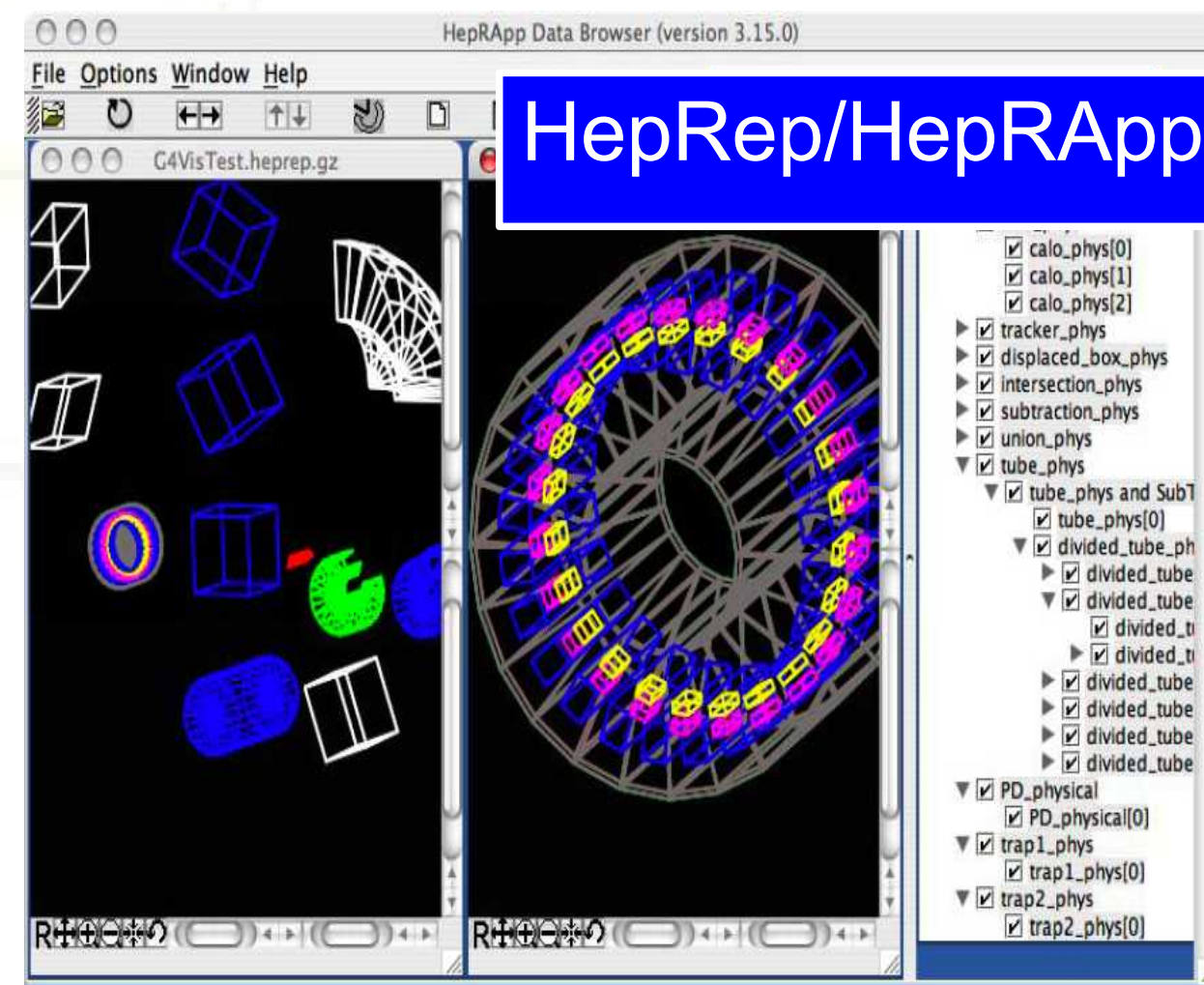
ATLAS Detector in DAWN



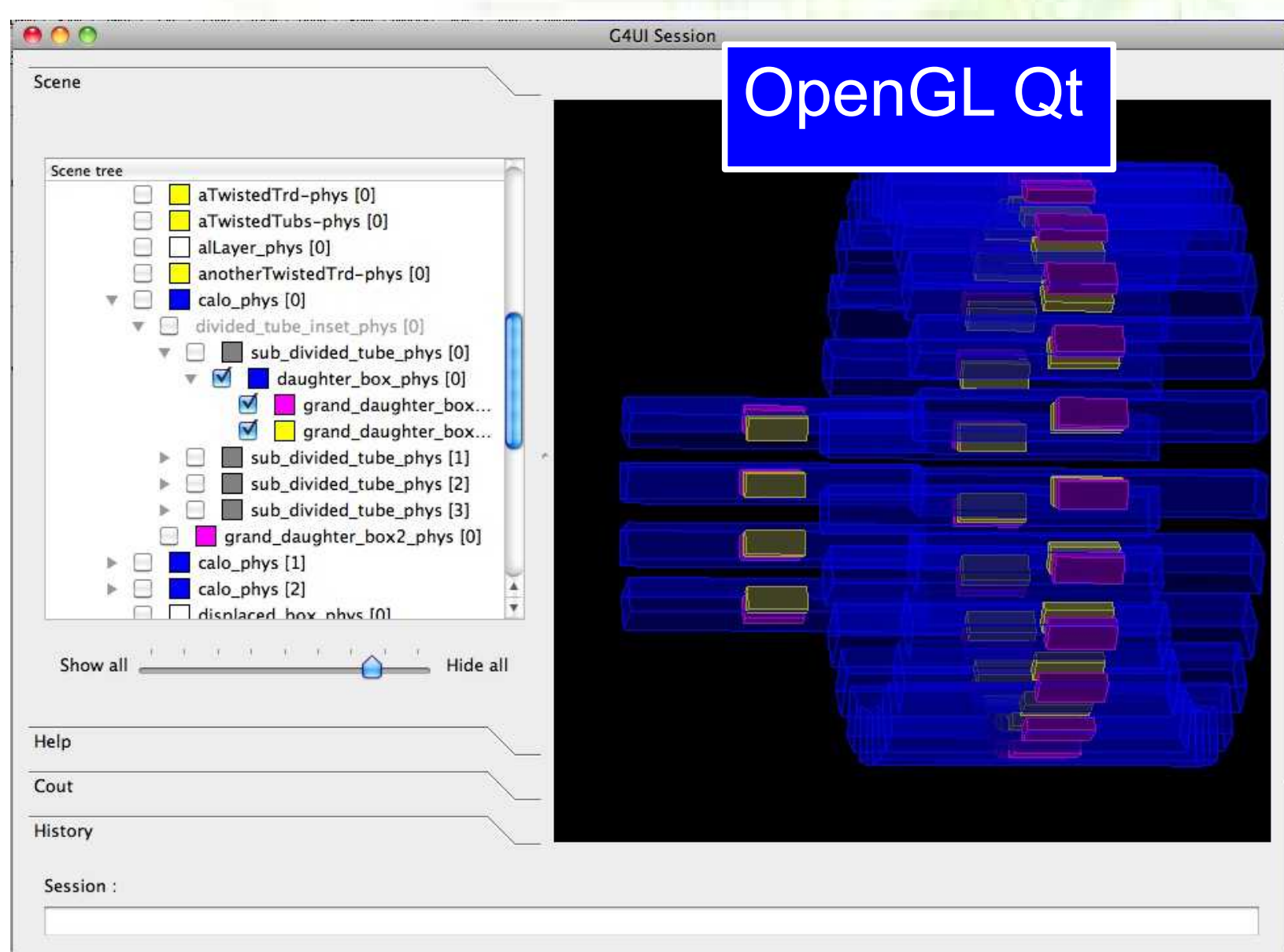
OpenInventor



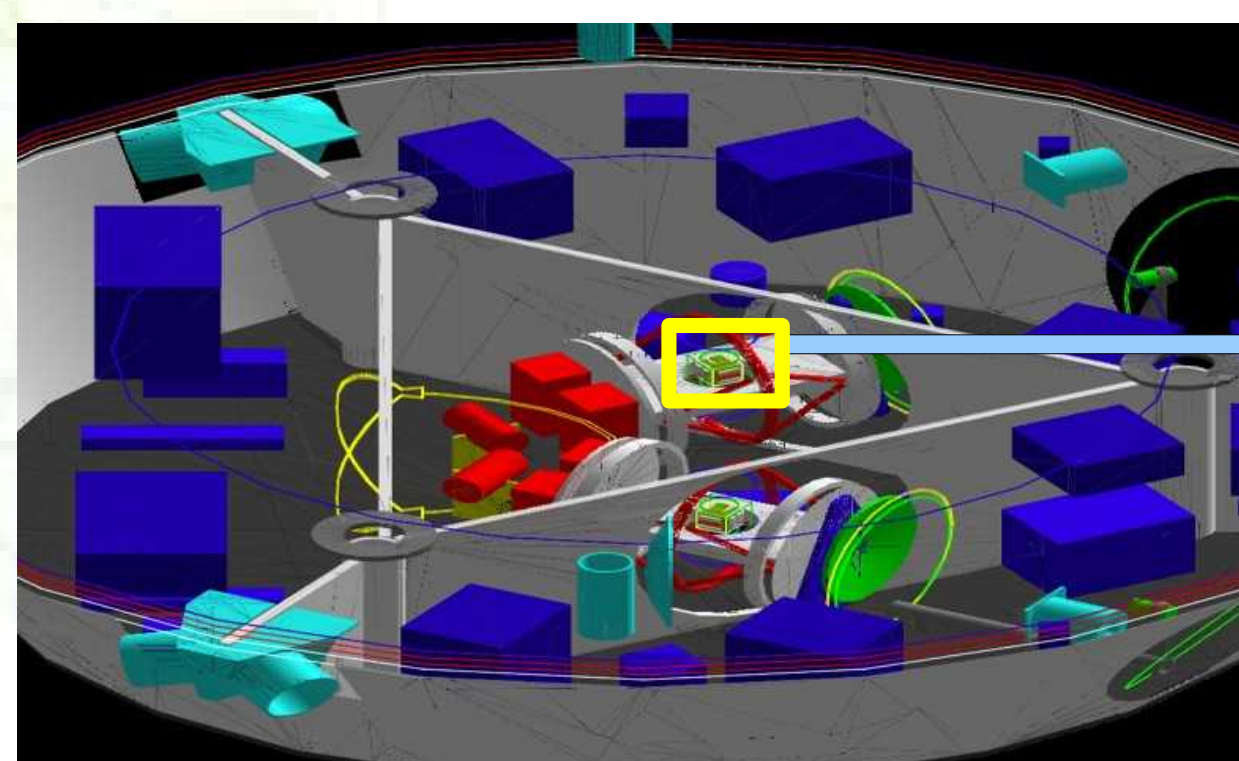
GAGTree file in GAG Browser



HepRep/HepRApp



OpenGL Qt



Zoom in EPS File

Last **Geant 4** release 4.9.5, has many improvements for OpenGL Drivers such as

- high quality printing
- making videos
- « google earth like » rotation
- speed improvements x2



Laurent Garnier : garnier@lal.in2p3.fr

