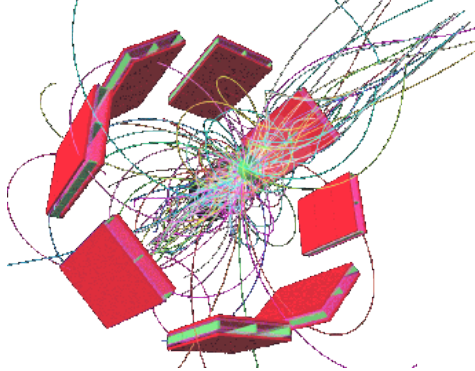
GraXML Update

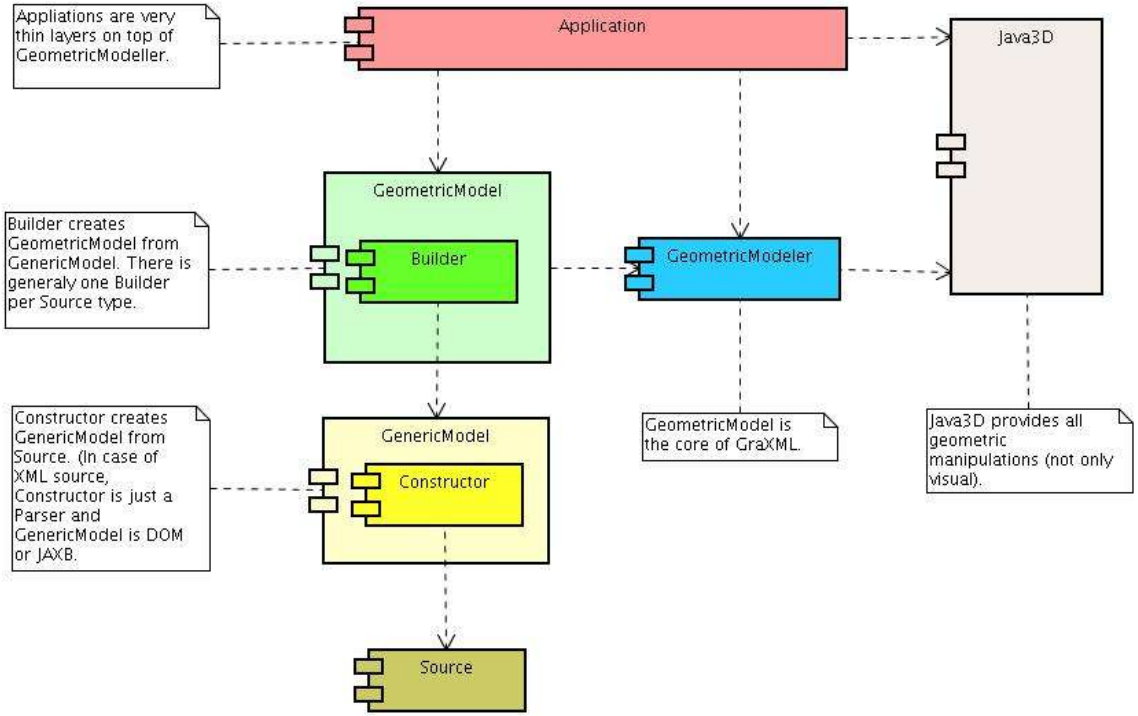


- New Architecture
- New Sources
- New Functionalities
- New Plans

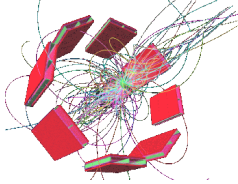
http://hrivnac.home.cern.ch/hrivnac/Activities/Packages/GraXML
http://hrivnac.home.cern.ch/hrivnac/Activities/2003/March/GraXML

New Architecture

- Re-factored into several components:
  - **Geometric Modeler** interprets and optimises GeometricModels.
  - **Generic Model**s (per data source) are created automaticaly.
  - **Geometric Model**s (per data source) are created by Builders.
  - **Applications** are very thin layers on top of Geometric Modeler:
    - Displays,
    - Converters.

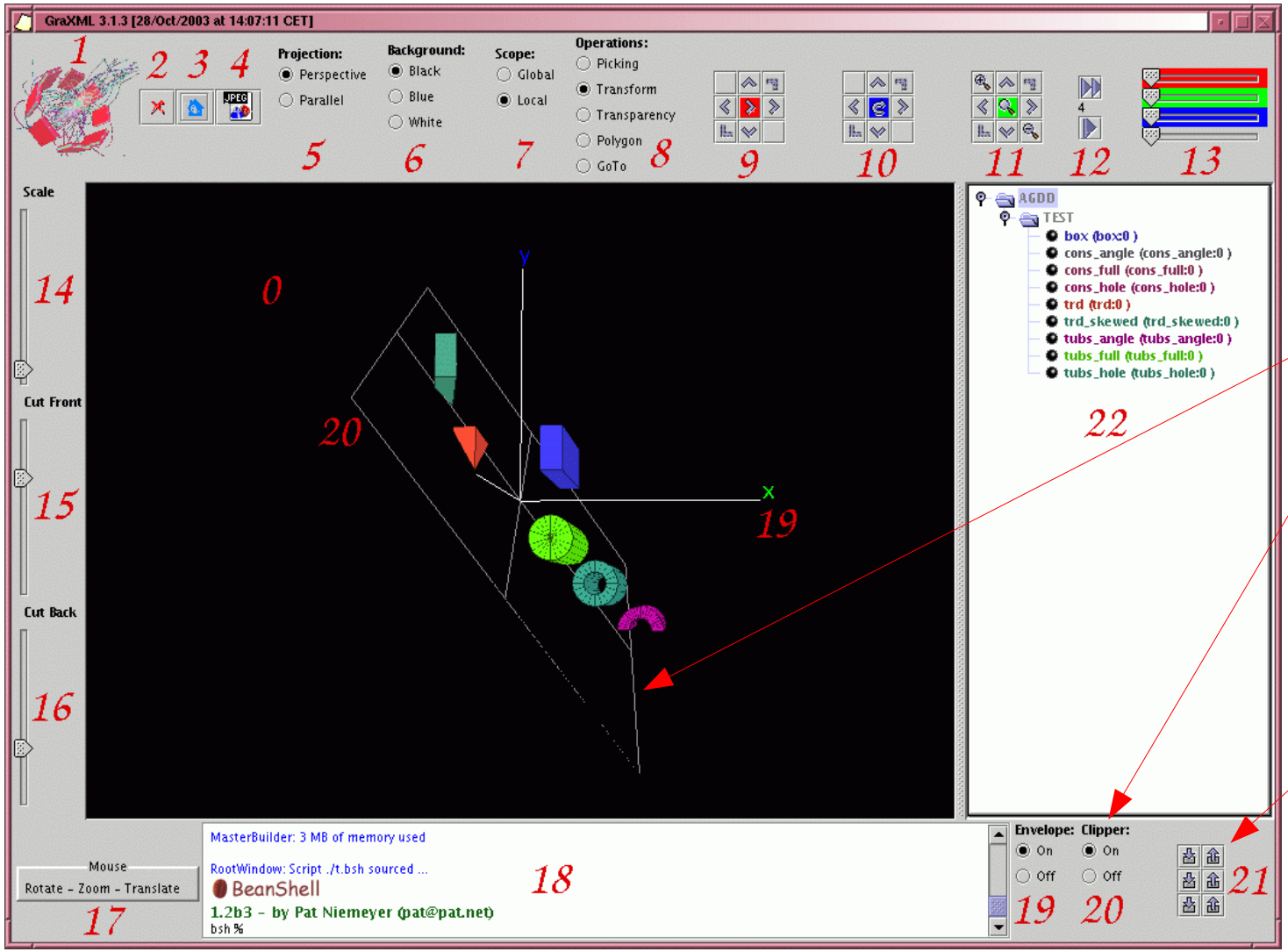


New Sources



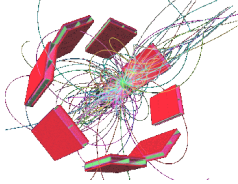
- New AGDD:
  - Superset of AGDD v7
  - Formulas
  - Access to SQL for numbers
  - New volumes
- Geant4 (via generic AGDD exporter)
- AtlasEvent XML
- Atlantis XML (not yet Tracks)
- GDML 1.0 (prototype)
- LCG/GDML (if usable)
- Direct connection from VMC (in development)

New Functionalities



Interactive Clipper to cut the scene in any direction.
(Up to six Clippers can be created from the scripting interface.)

Saver/reader of Transformation Status.



New Plans

more important

- New sources
- Integration with FreeHEP/JAS:
  - Common GUI
  - Common Scripting (BeanShell, Python, PNuts)
  - Common 3D Graphics (GraXML + LegoPlots)
  - Interface HEPRep
- Direct API in Java and C++ (to connect to VMC)
- Collision Detection
- Interoperability with OpenInventor (used by HEPVis and OpenScientist)
- Boolean volumes

less important