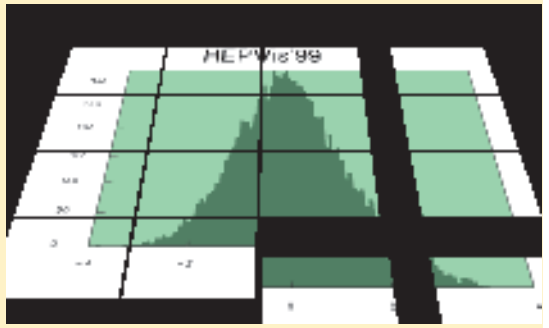
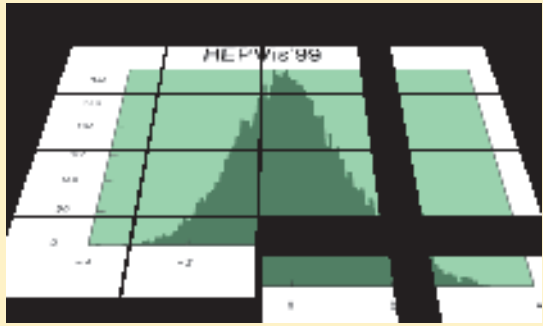
HEPVis'99
Orsay



- Software organisation, Collaborative work, Management tools
- Architecture, Models
- Networking, Data exchange, Interface Definitions
- Representation tools
- Interactivity, Data browsing, Associated tools
- Scripting, Command languages
- Visualization at last

http://www.lal.in2p3.fr/HEPVis99/

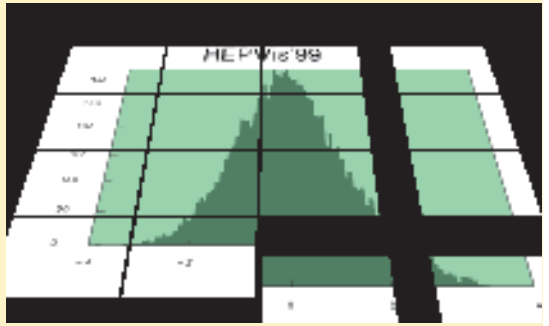
HEPVis'99
Orsay



- HEPVis-lib, JAS, Wired, Atlantis, HippoDraw, Open Scientist, LHC++, Geant4, ...
- Atlas, CMS, LHC-b, BaBar, Cleo, ...
- CERN, SLAC, Fermilab, ...

http://www.lal.in2p3.fr/HEPVis99/

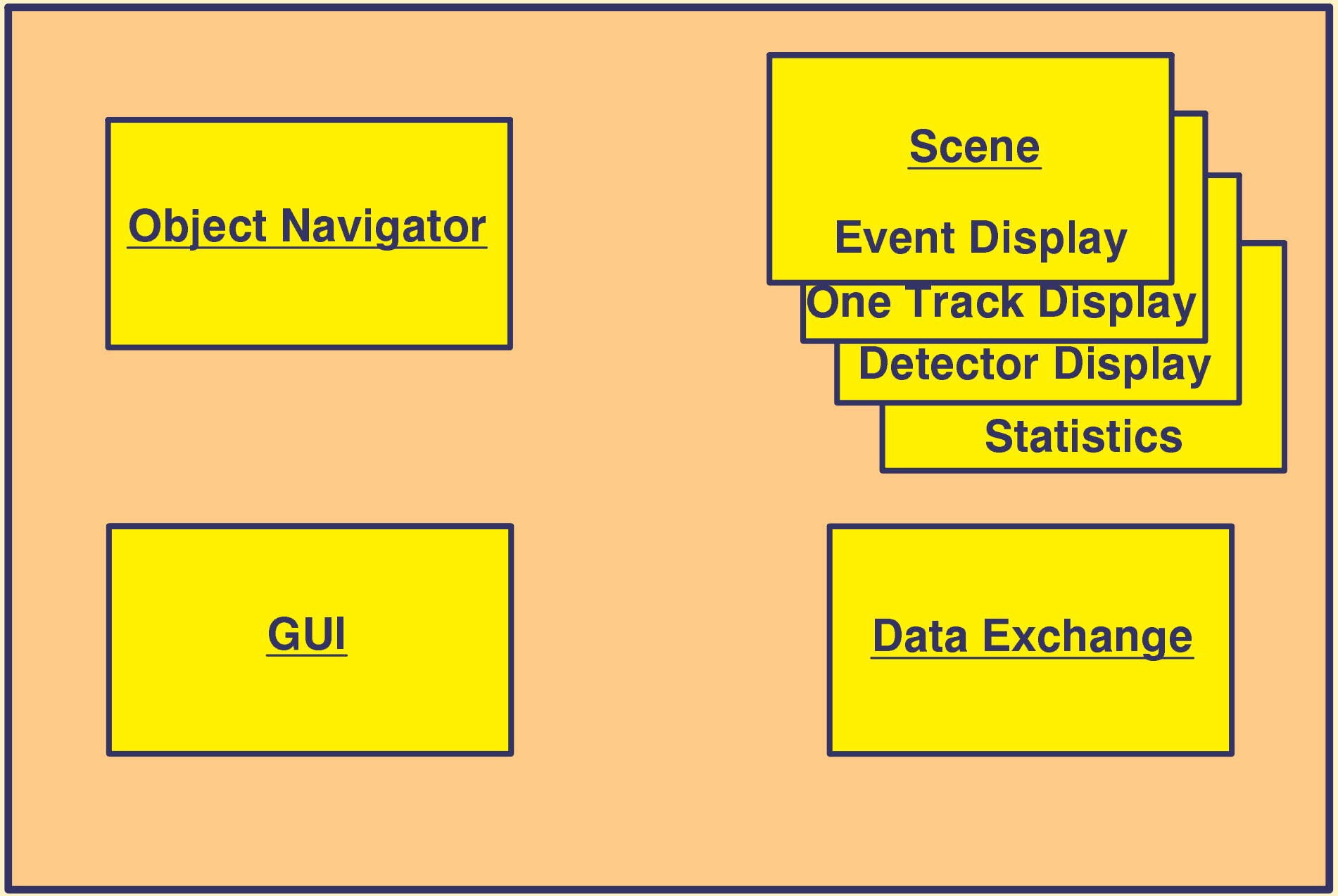
HEPVis'99
Orsay



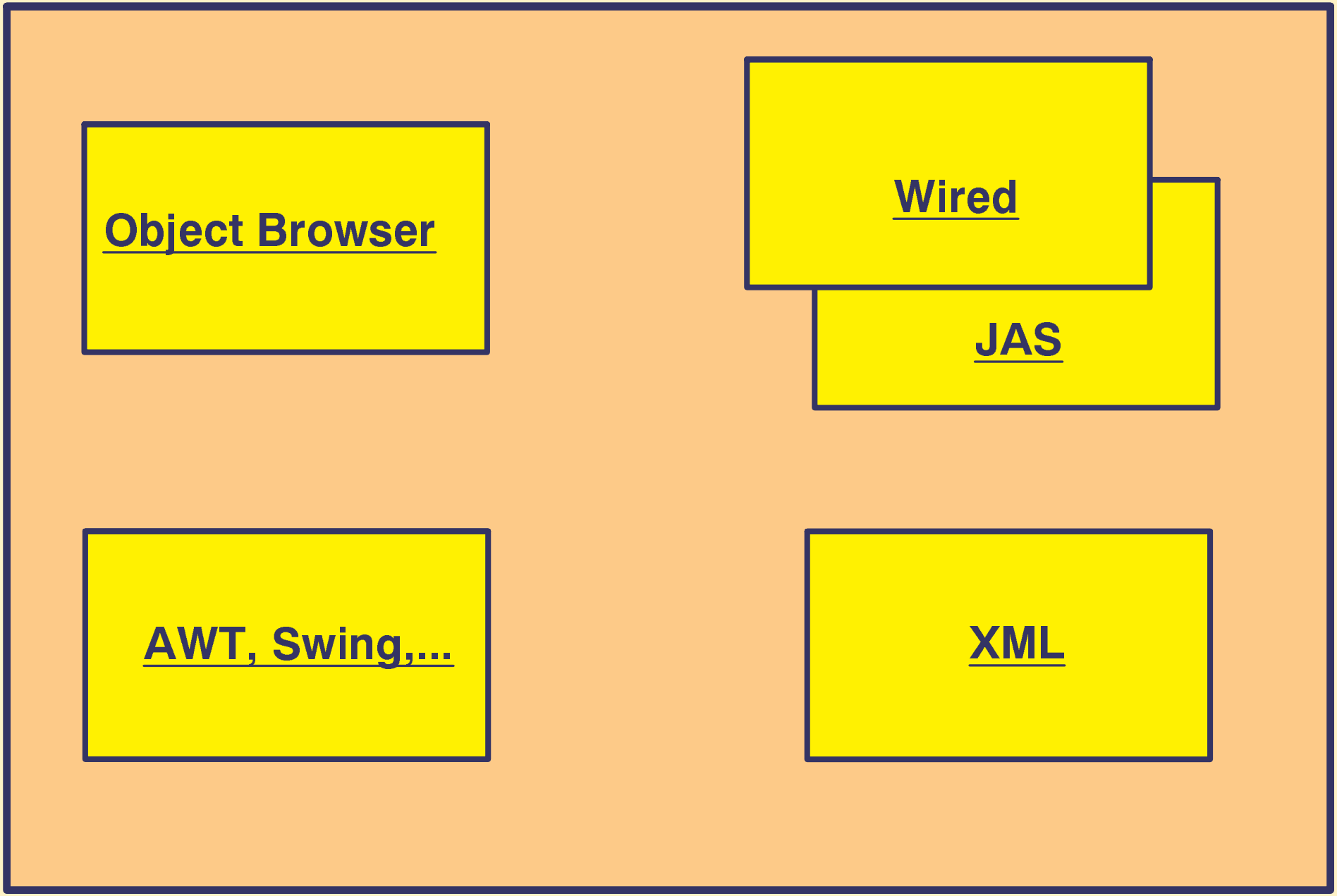
- very constructive meeting
- clear split between C++ / Java worlds
- aim: coherent & modular solution
- good situation in Java, worse in C++
- good situation in EventDisplay, worse in Statistics

http://www.lal.in2p3.fr/HEPVis99/

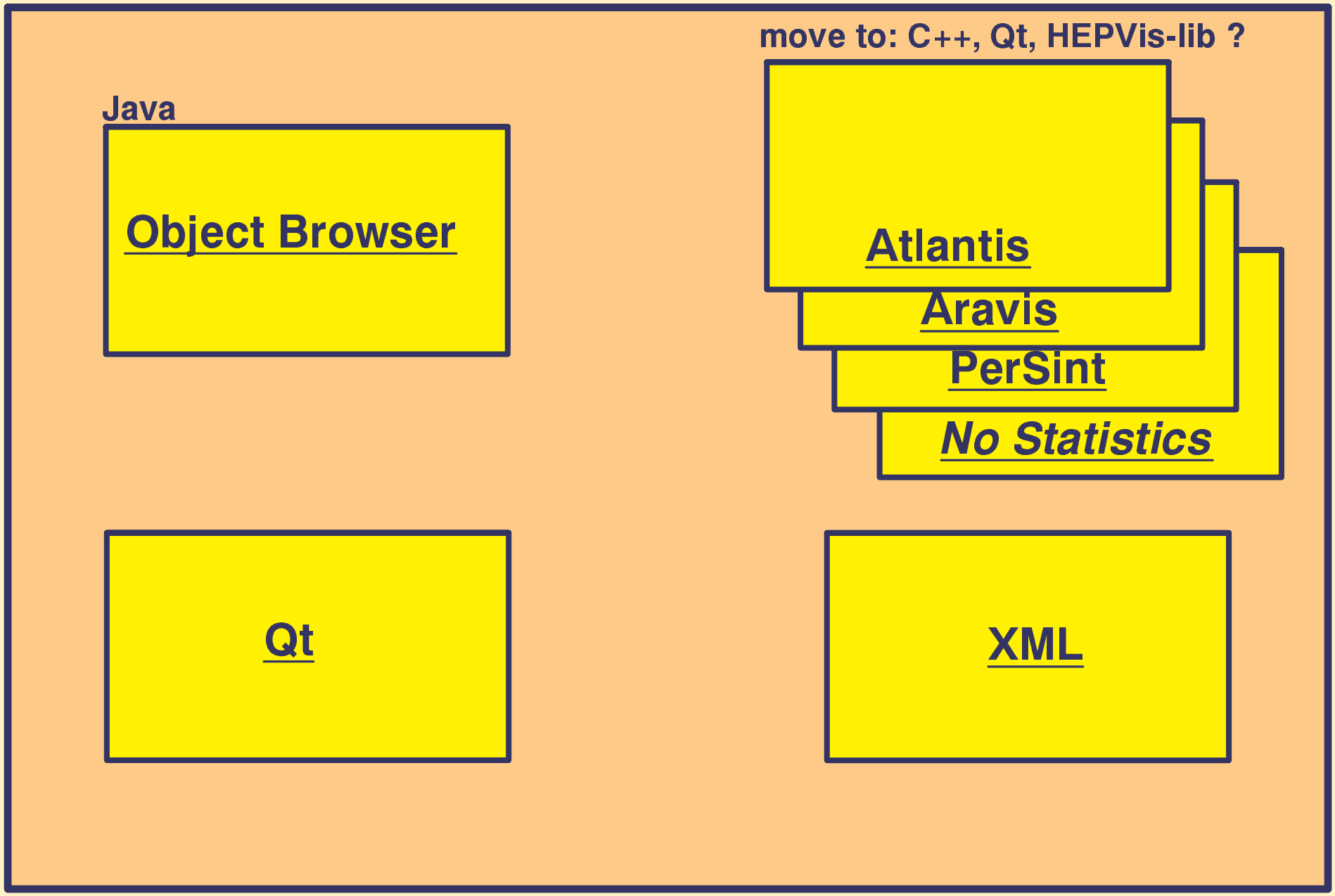
Visualization



Visualization (Atlas) - Java



Visualization (Atlas) - C++

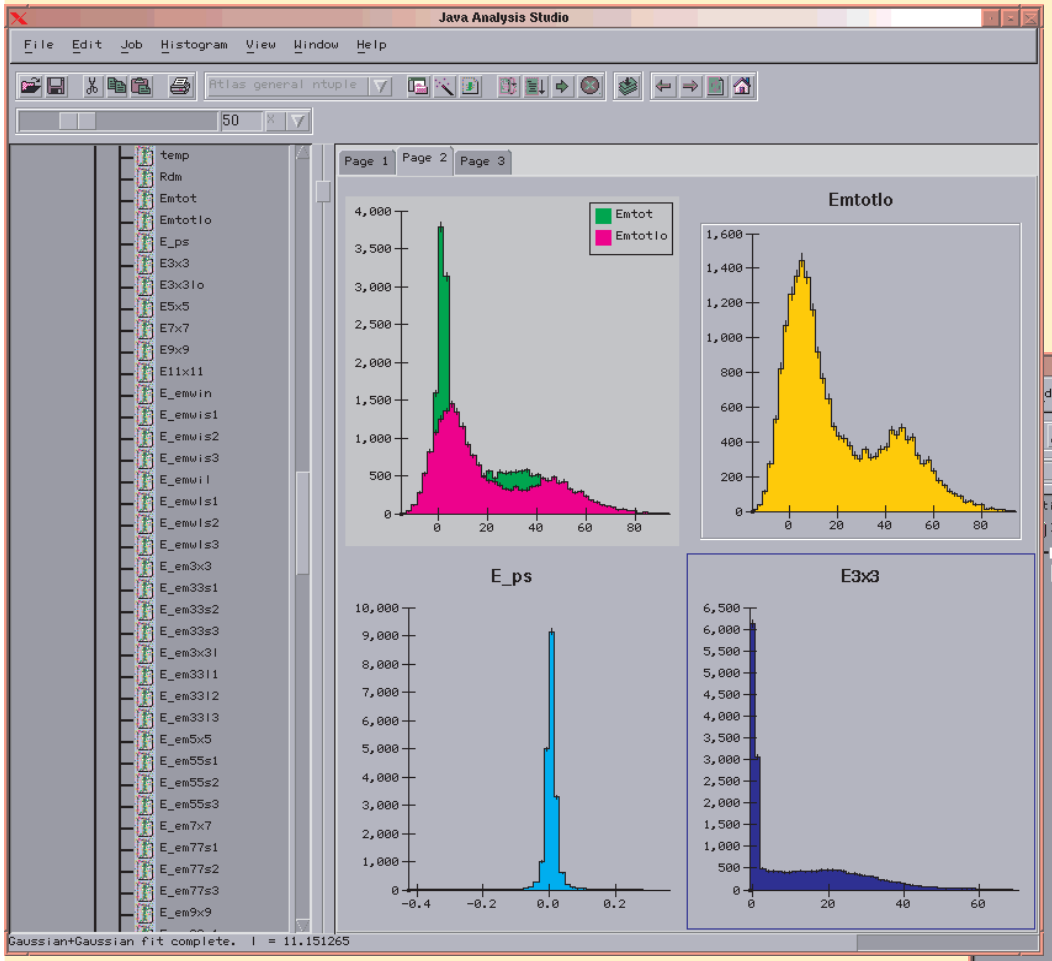


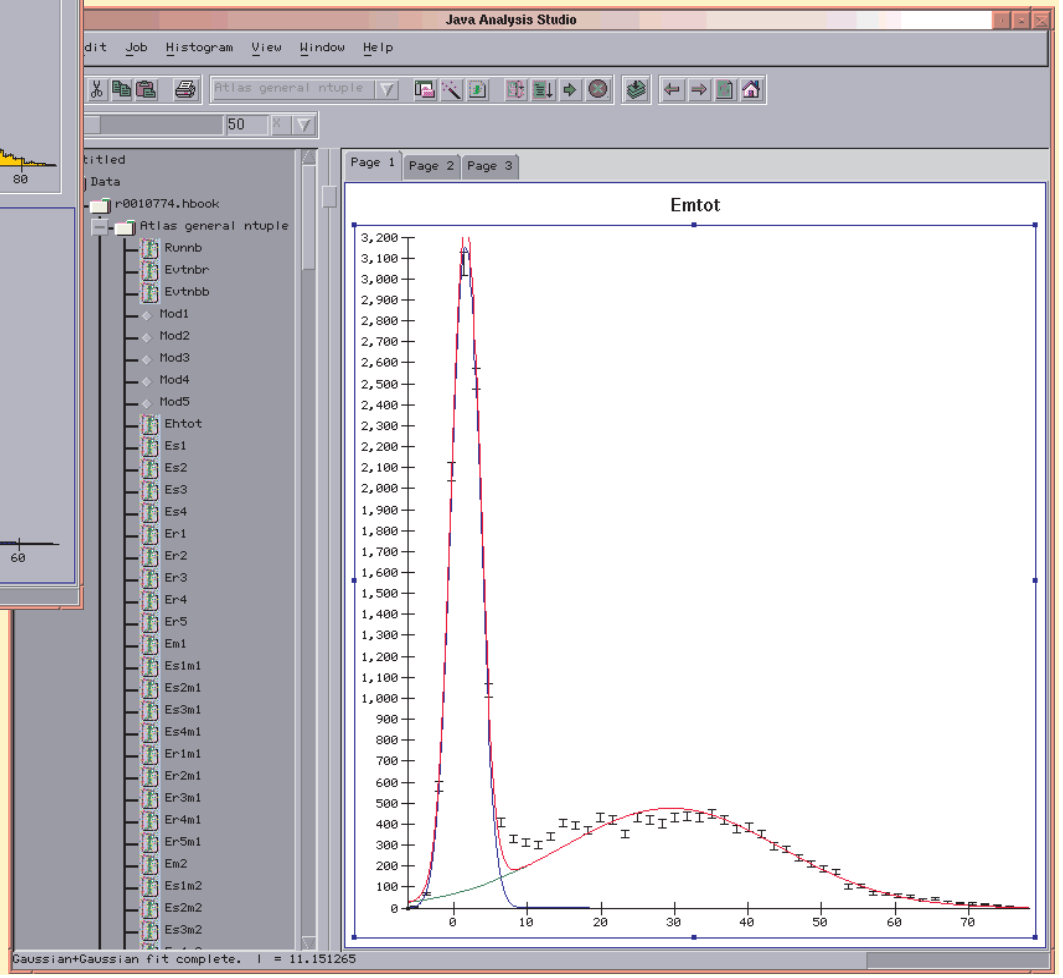
New WG

- seeing problems in Statistics, new WG has been created (analogy to HEPVis-lib group, created in 1997)
- Open Software (Bazar) & SE
- no managers, just participants
- modularity (+ open-endness) & coherence
- C++, Java
- wide agreement (except Root)

JAS 2.0

http://www-sldnt.slac.stanford.edu/jasweb/
/afs/cern.ch/sw/lhcxx/contrib/JavaAnalysisStudio

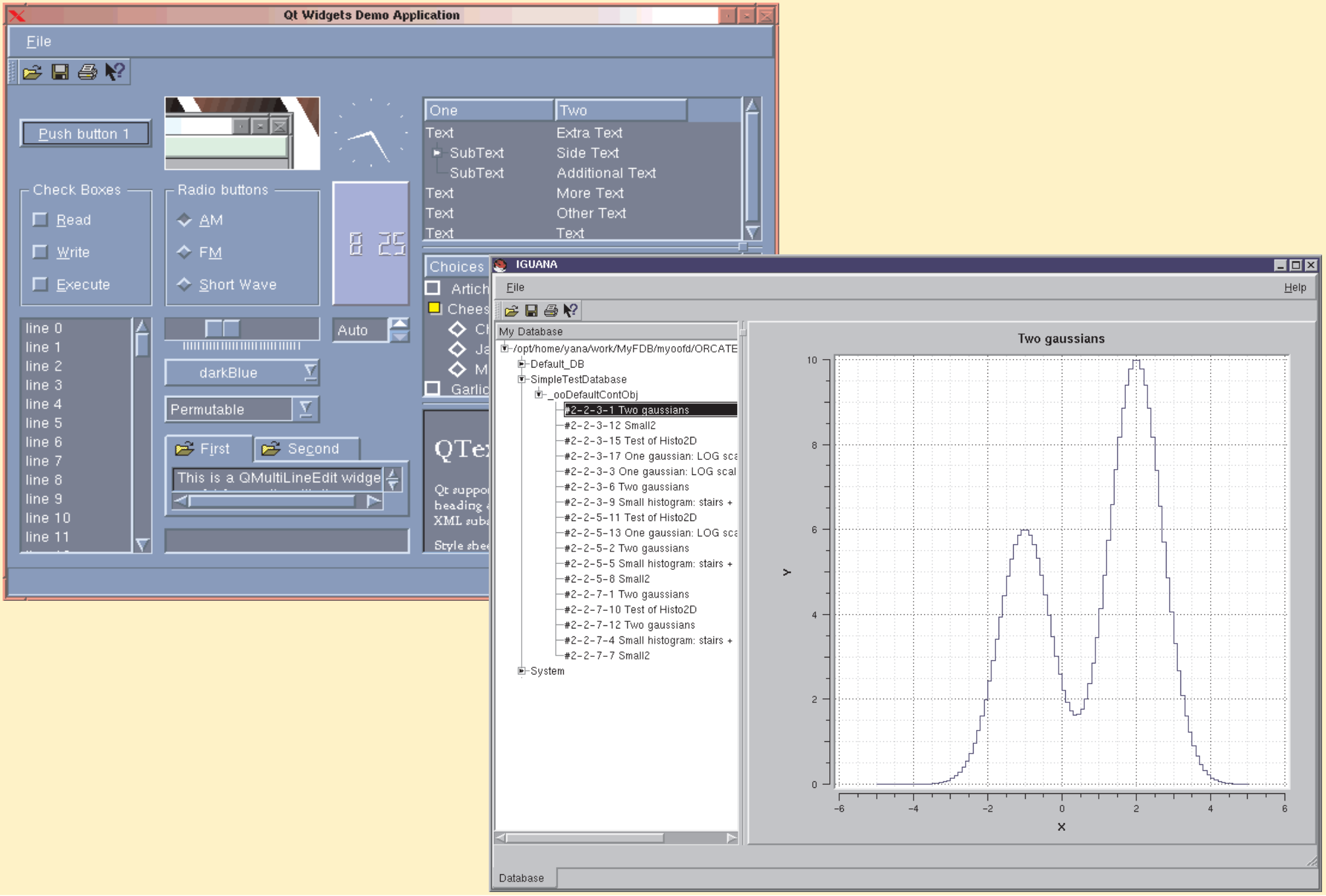





```
histogram myhist = new Histogram("My Histogram");
for (int i=0; i<100; i++) myhist.fill(Math.random());
```

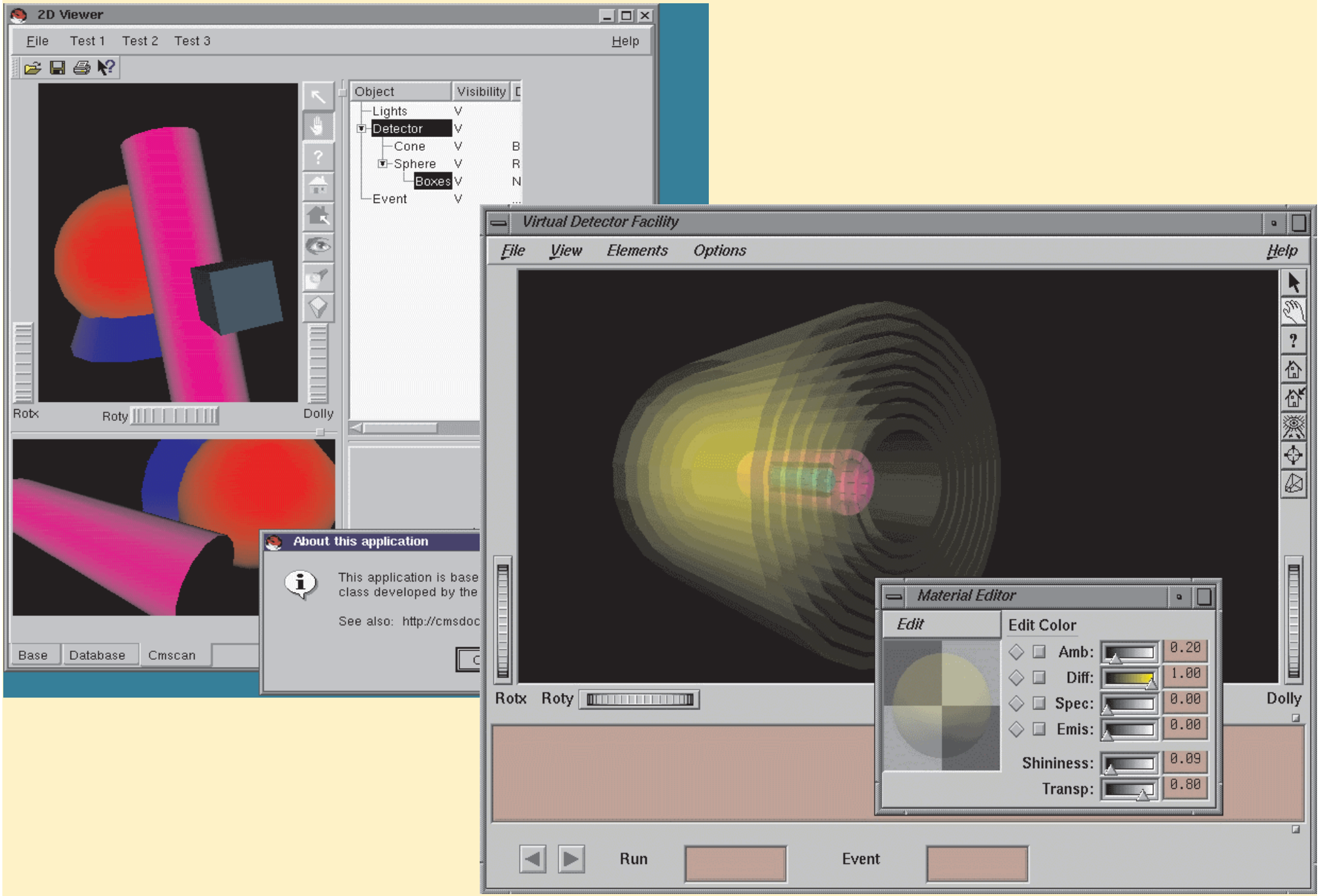
Qt 2.0.1

http://www.troll.no
/afs/cern.ch/atlas/project/graphics/qt-2.0.1



HEPVis 3.0.0

http://cactus.phyast.pitt.edu/~joe/hepvis/hepvis.html



Proposal for Atlas

- offer complete Java-based solution (Wired, Jas,...)
- offer incomplete C++/F77-based solution with evolution (Aravis, Atlantis, Persint, ...)
- support new WG
- collaborate with others (CMS, BaBar,...)