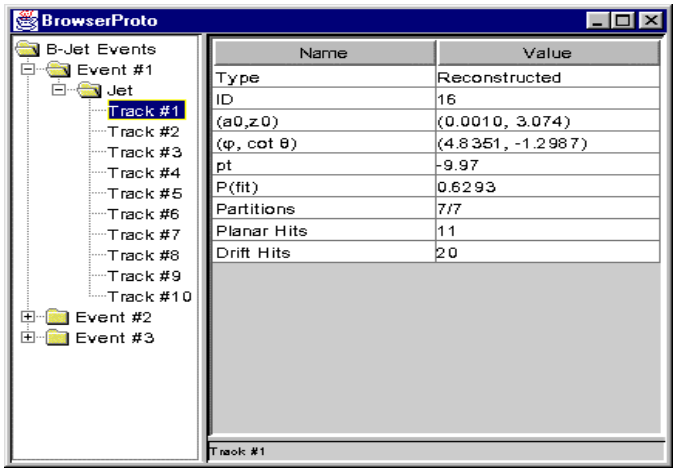
Basic Principles of Graphics

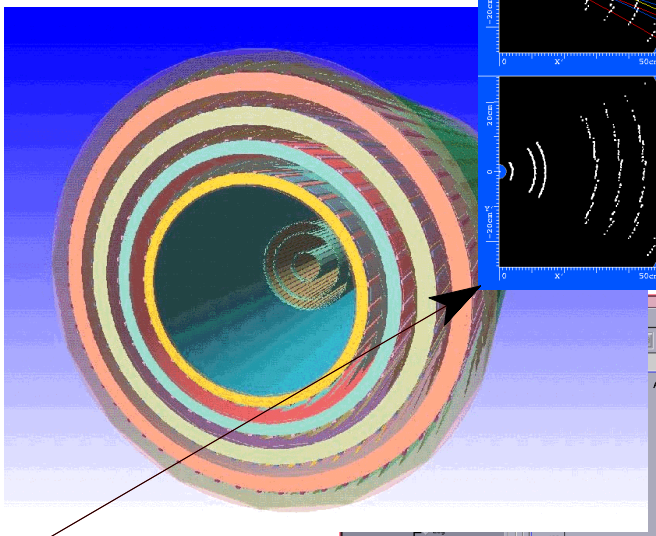
Mission Statement
The aim of the Atlas Graphics is to enable visual representation of the objects in the Atlas software. The Design of the Atlas Graphics is based on the believe that both requirements and graphics software abilities will be very broad at any time and will constantly evolve. The Atlas Graphics should be able to accomodate all that diversity and change. This can be accomplished only by extreme flexibility and modularity of the Graphics Framework.

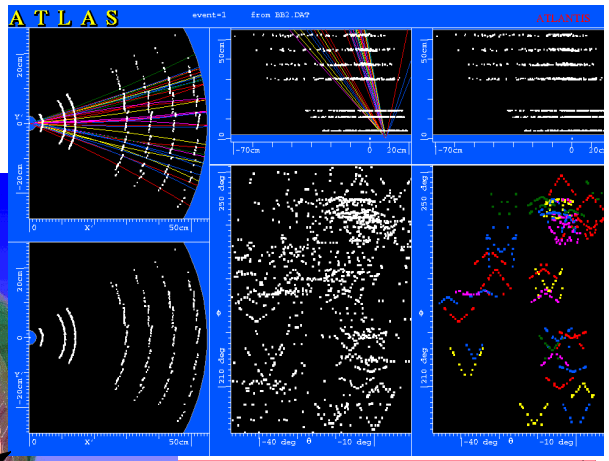
Major Architectural Principles
The fact, that object is visualized should not influence the design of that object.
The design of the graphics should not depend on any particular visualization package.

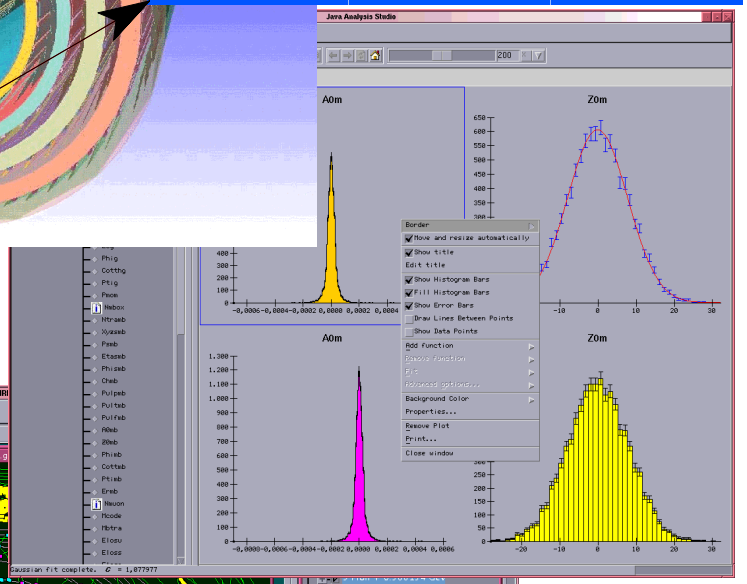
Evolvability
You need to build a system that is futureproof; it's no good just making a modular system. You need to realize that your system is just going to be a module in some bigger system to come, and so you have to be part of something else, and it's a bit of a way of life.
Tim Berners-Lee at the WWW7 Conference

Graphics Design



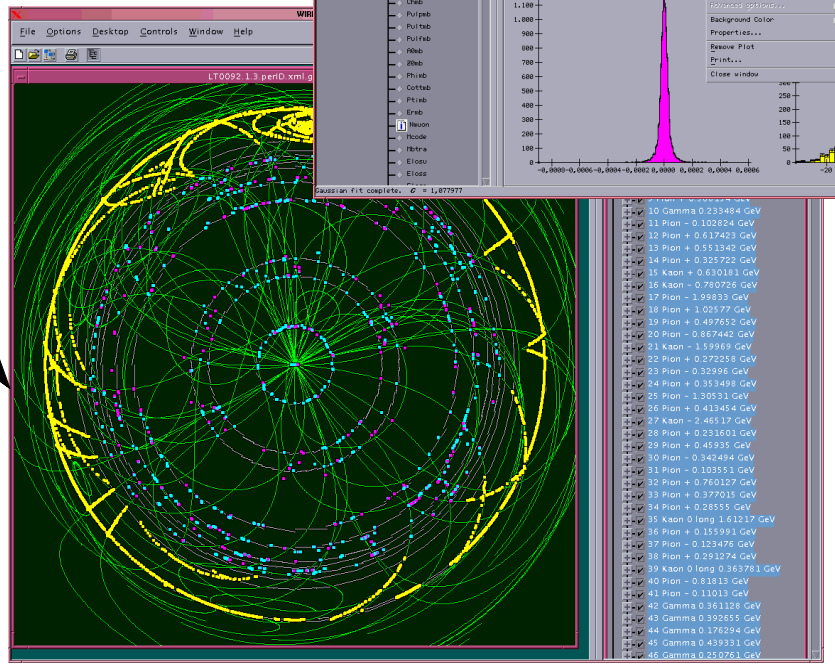






Offline Framework

Graphics Framework



Objects are displayed on Scenes through their Models and Reps.

Practical Development

- HEP-wide Collaboration:
  - WIRED (Atlas, BaBar, Chorus, Delphi, LHCb, IT)
  - Atlantis (Aleph, Atlas, BaBar)
  - HEPVis/ASO/AIDA
  - JAS
  - Open Scientist
- Thin Atlas Layer:
  - interoperation with Atlas Offline Framework
  - access to Data
- Strong role of Java