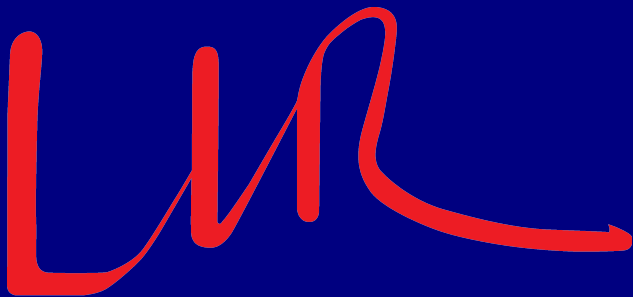


Online event display developments

Daniel Jeans

LLR Ecole polytechnique



Integrate DHCAL into combined event display
For recent combined run @ FNAL
First order combination of ECAL/DHCAL data

Integration was quite easy,
prompted some additional developments:

General cleaning up of code
Reducing duplication

Debugging of online display

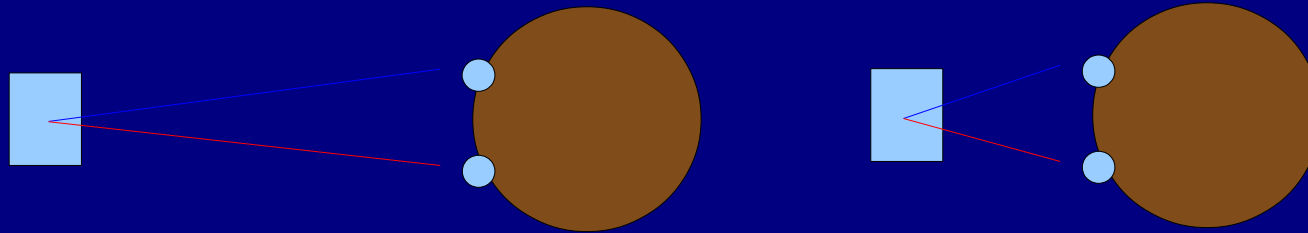
No more problem of drastic slowing-down when using display

- incorrect cleaning of previous events lead to ROOT “memory leaks”
- now about 2 orders of magnitude faster

Development of 3-d display

3d or stereo-scopic event display

If you have 2 good eyes and look at object
your left and right eyes see slightly rotated view of same scene



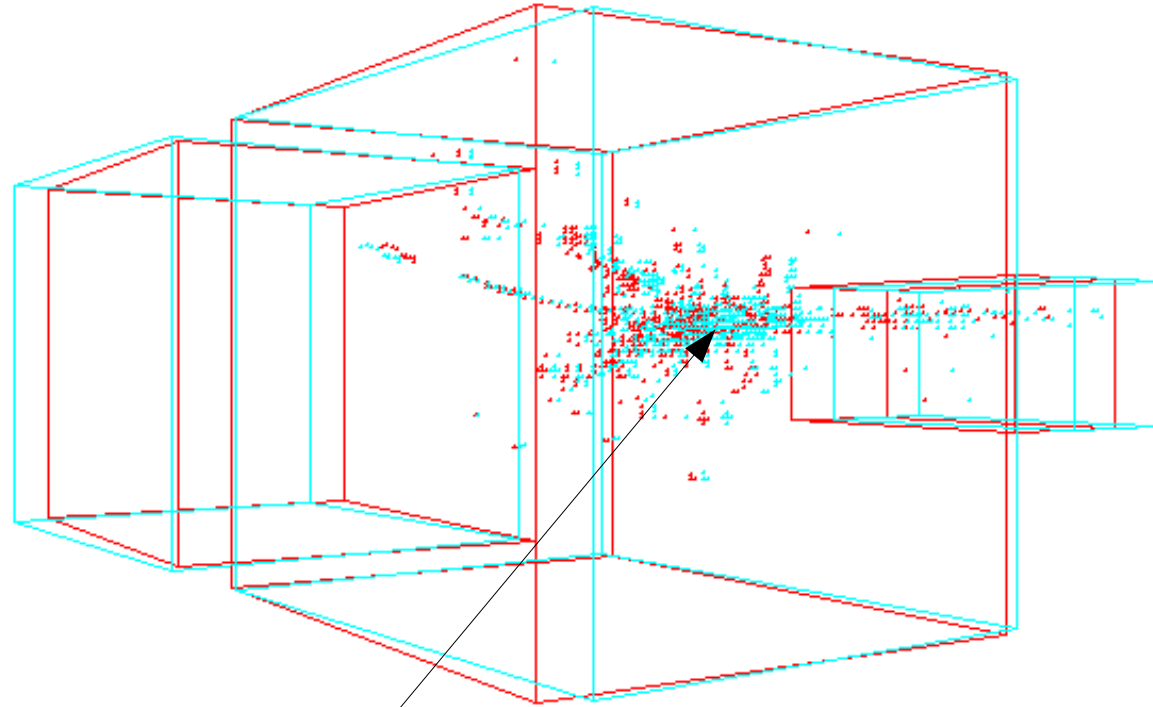
if you have a normally functioning brain
the angle between the views is interpreted as the distance to the object

the basic idea behind stereoscopic displays :
present differently rotated views of an object to each eye
“fool” the brain into a perception of depth

In practice superimpose 2 rotated images with

- different colours: different colour filters over each eye
- different polarisations (with polarised filters)
- or other more advanced methods using lenses

You can see the two superimposed images
One red, one cyan



In dense regions, images can superimpose
lose some of the 3d effect,
however brain can (mostly) compensate

In online event display, can interactively rotate the scene
gives significantly greater 3d impression

now go to

http://polywww.in2p3.fr/~jeans/threeD_DisWeb/welcome.html