

Event Display with D0Scan_qt

Status and future plans

F. Chandez

LPC Clermont - Univ. B. Pascal -IN2P3

Outline

- **2D Views**

- Hits
- Tracks
- Picking

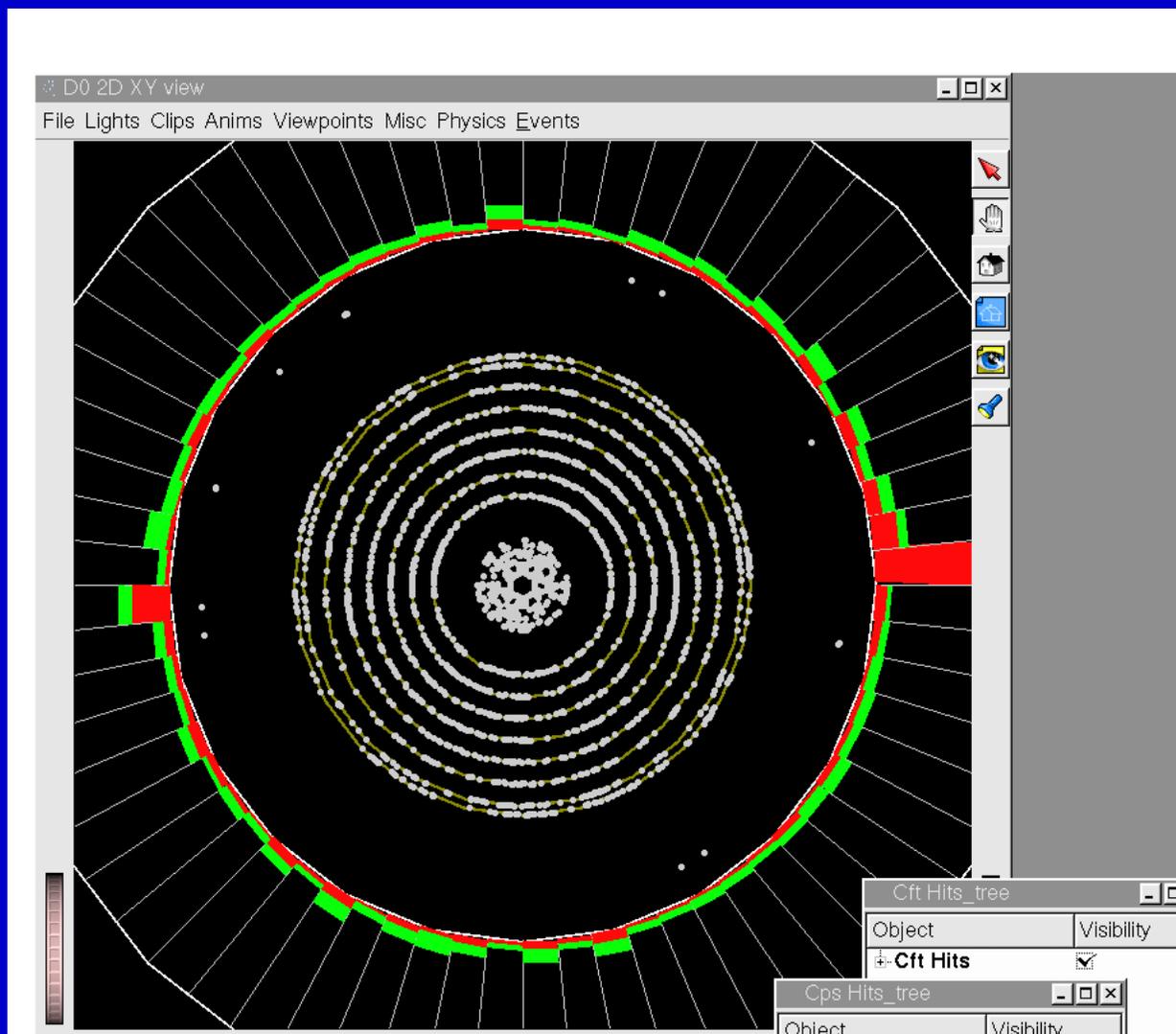
- **3D view**

- Calorimeter cells in forward region
- FPS hits

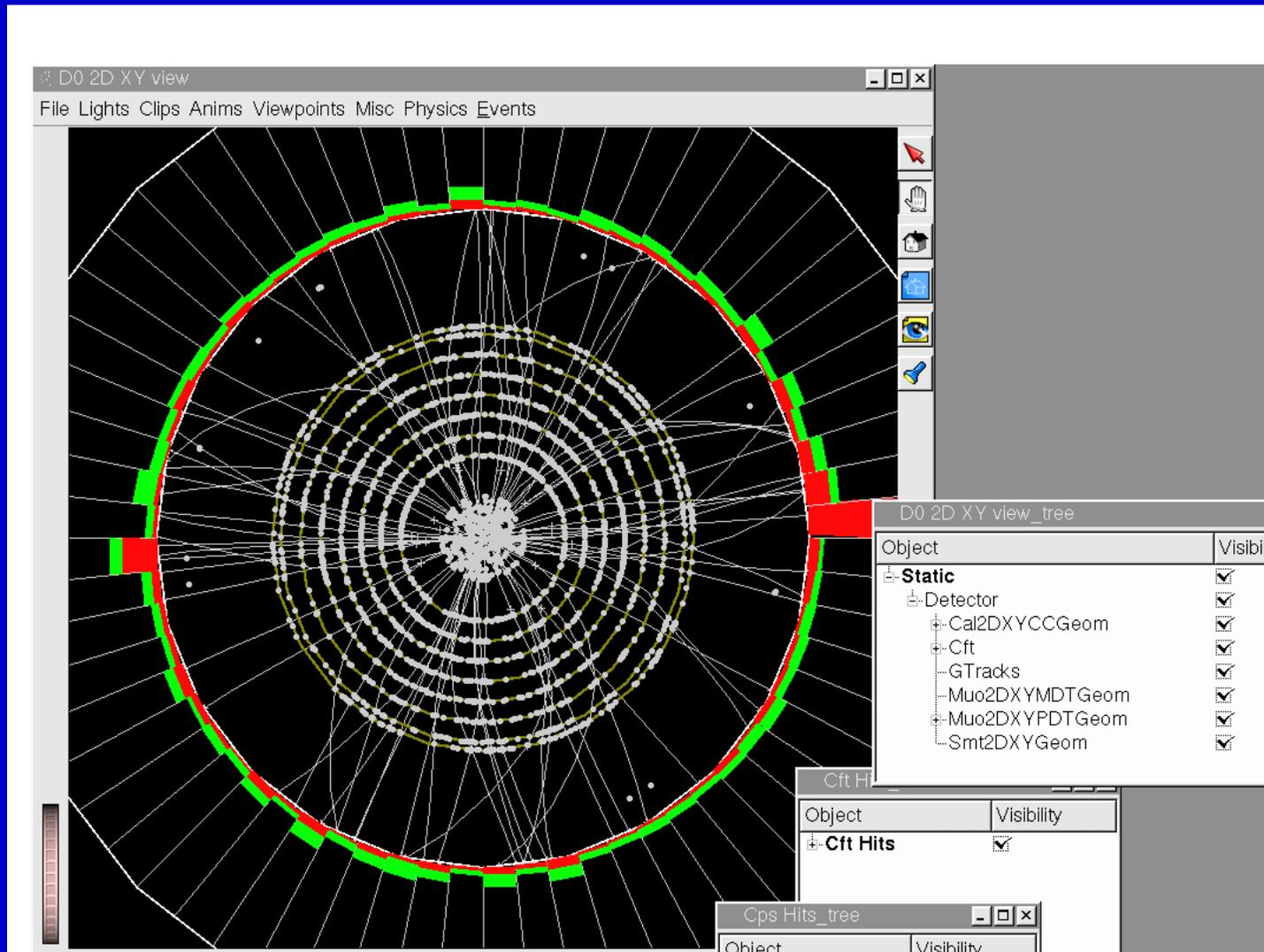
- **Future plans**

D0scan_qt_x p16.04.00 release version

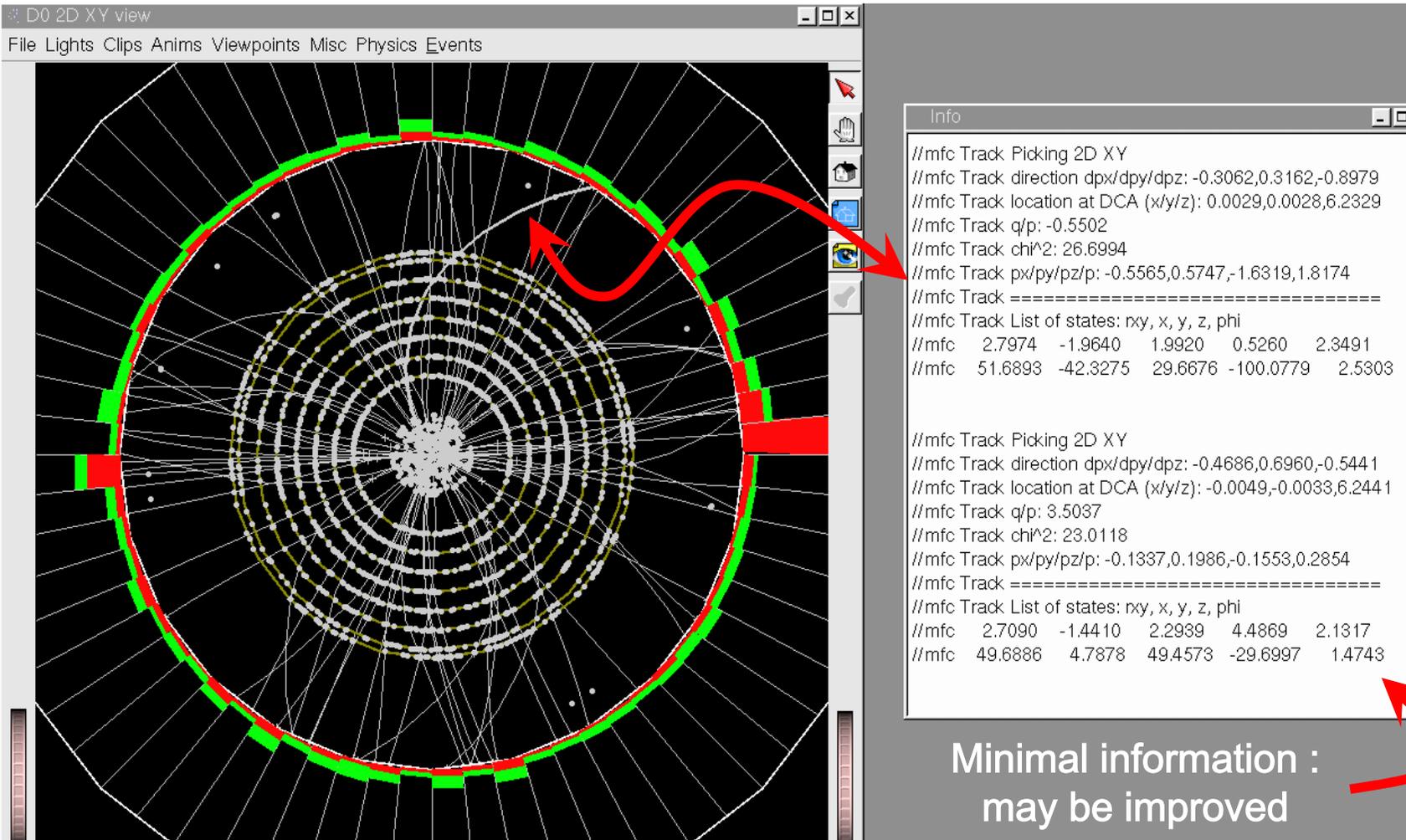
2D views : CFT&CPS hits



2D views : tracks



2D views : picking



The screenshot shows a software interface with a window titled "D0 2D XY view". The window contains a 2D plot of particle tracks, with several tracks highlighted in red and green. A red arrow points from the plot to the "Info" panel on the right. The "Info" panel displays two sets of track data:

```
//mfc Track Picking 2D XY
//mfc Track direction dpx/dpy/dpz: -0.3062,0.3162,-0.8979
//mfc Track location at DCA (x/y/z): 0.0029,0.0028,6.2329
//mfc Track q/p: -0.5502
//mfc Track chi^2: 26.6994
//mfc Track px/py/pz/p: -0.5565,0.5747,-1.6319,1.8174
//mfc Track =====
//mfc Track List of states: nxy, x, y, z, phi
//mfc 2.7974 -1.9640 1.9920 0.5260 2.3491
//mfc 51.6893 -42.3275 29.6676 -100.0779 2.5303

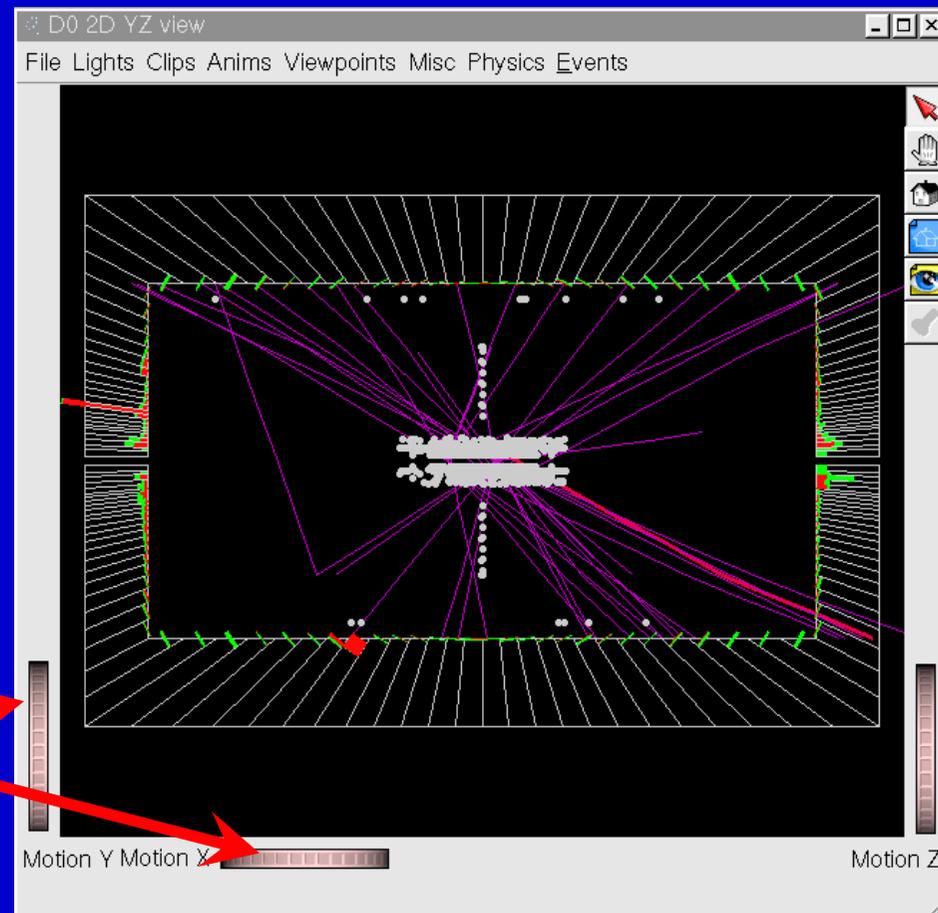
//mfc Track Picking 2D XY
//mfc Track direction dpx/dpy/dpz: -0.4686,0.6960,-0.5441
//mfc Track location at DCA (x/y/z): -0.0049,-0.0033,6.2441
//mfc Track q/p: 3.5037
//mfc Track chi^2: 23.0118
//mfc Track px/py/pz/p: -0.1337,0.1986,-0.1553,0.2854
//mfc Track =====
//mfc Track List of states: nxy, x, y, z, phi
//mfc 2.7090 -1.4410 2.2939 4.4869 2.1317
//mfc 49.6886 4.7878 49.4573 -29.6997 1.4743
```

Minimal information :
may be improved

2D views: YZ

- CFT hits are always at $z=0$
 - Modification is foreseen
- FPS hits have been implemented
 - Not visible on that example (no reconstructed FPS objects)
 - -> to be checked with reconstructed FPS objects

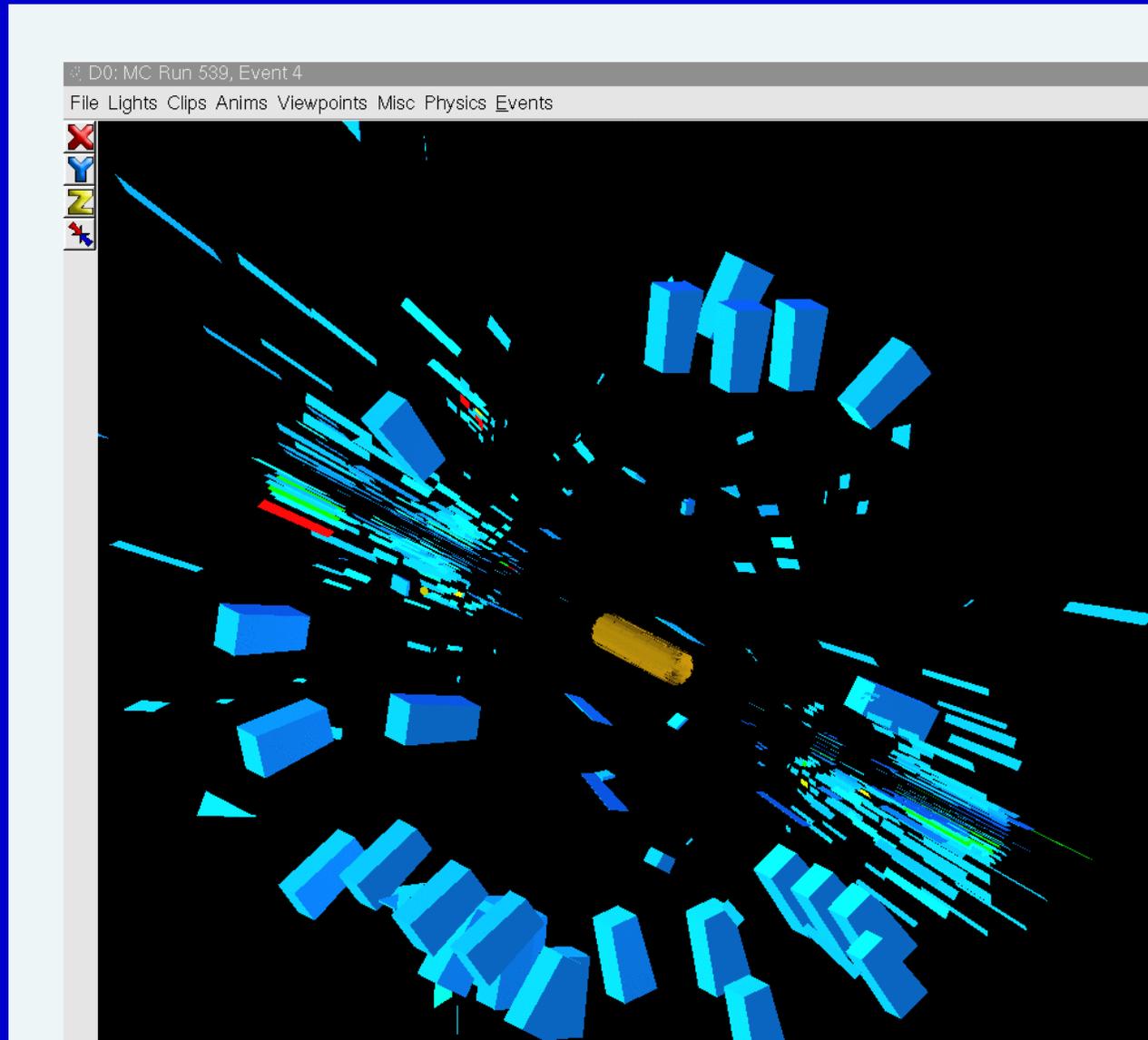
Cursors are not useful on those 2D views
Supress them or enable them



Classes and Chunks

	3D	2DXY	2DYZ
CFT	CftDisplayFibers	Cft2DXYDisplayFibers CftClusterChunk	Cft2DYZDisplayFibers CftClusterChunk
CPS	CpsDisplayHits	Cps2DXYDisplayHits CPSClusterChunk	Cps2DYZDisplayHits CPSClusterChunk
FPS	FpsDisplayHits	Fps2DXYDisplayHits FPSClusterChunk	Fps2DYZDisplayHits FPSClusterChunk

3D views



Calorimeter cells on forward region are implemented

On going and future plans

- **Check and clean present work**

- **“Context “**
 - To be able to save and load after a working configuration
 - Working version means on/off detector sections as well as camera point of view
 - Load different ‘context’ already defined in advance

- **L3**
 - Visualize the detector as seen by the L3 trigger
 - Need to establish a strategy (road map at least)

- **Others useful or urgent business**
 - Tell us