

Visualization of SciFiClusters in Panoramix

06 / 04 / 2014

- New algorithms added to the package **Vis/SoEvent** to “integrate” the new BGV SciFi classes with Panoramix
 - Now can use `Object_visualize(<LHCb::SciFiCluster>)` (or click on the ScFiClusters TES location on the Panoramix GUI)
 - Get info printout when a cluster is selected (with the mouse)
- Get the package **Vis/SoEvent** from here:
[/afs/cern.ch/work/p/phopchev/public/BGVPano/](https://afs.cern.ch/work/p/phopchev/public/BGVPano/)
- copy it to `~/cmtuser/Panoramix_v22r0`
- The last step is to compile it, but don't do it yet

The following updates were necessary to the BGV SW components

- **BGV xml geometry**: created v1r16 with changed DetElement ClassID values
- **SciFi/SciFiDet**: use the new ClassIDs
- **SciFi/SciFiEvent**: New SciFiCluster ClassID
- These latest versions are needed in order to use the visualization features
- The latest geometry: </afs/cern.ch/work/p/phopchev/public/BGVGeo>
- The latest SciFi digi packages:
</afs/cern.ch/work/p/phopchev/public/BGVDigi>
 - Get them to `~/cmtuser/Panoramix_v22r0` and compile them
- Finally, compile the **Vis/SoEvent** package

To run Panoramix with GUI:

- Open a new shell, login script, SetupProject
- Run a command similar to this:

```
/afs/cern.ch/work/p/phopchev/public/BGVExamples/pano_run_vis.sh
```

- As input data file can use this:
`/afs/cern.ch/work/p/phopchev/public/BGVDigi/DigiSamples/raw-sim1r0-geo1r16-100ev.digi`
- Geometry \geq v1r16 should be used (see `DDDB_custom.py`)