

Efforts on Event Display at LLR

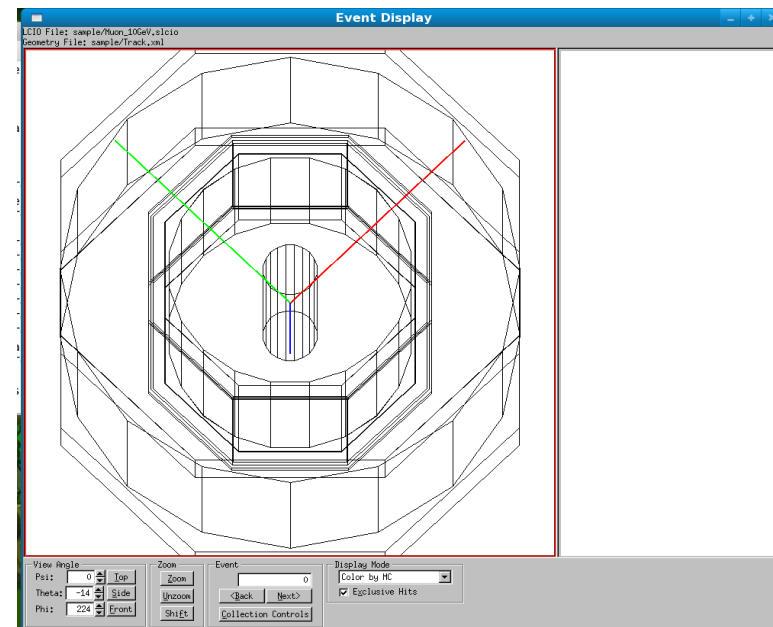
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Outline



- Motivation:
 - Visualize ILC & test beam events
 - Understand shower/Jet details
- Previous efforts (2 yrs old) by Allister Sanchez
- Status of current event display program
- To do list

- Based on Root TGeo classes
- Interface to LCIO & GEAR
- Test beam & LDC Geometry are available
- No longer supported & hard to use -> existing source code is still very precious to us

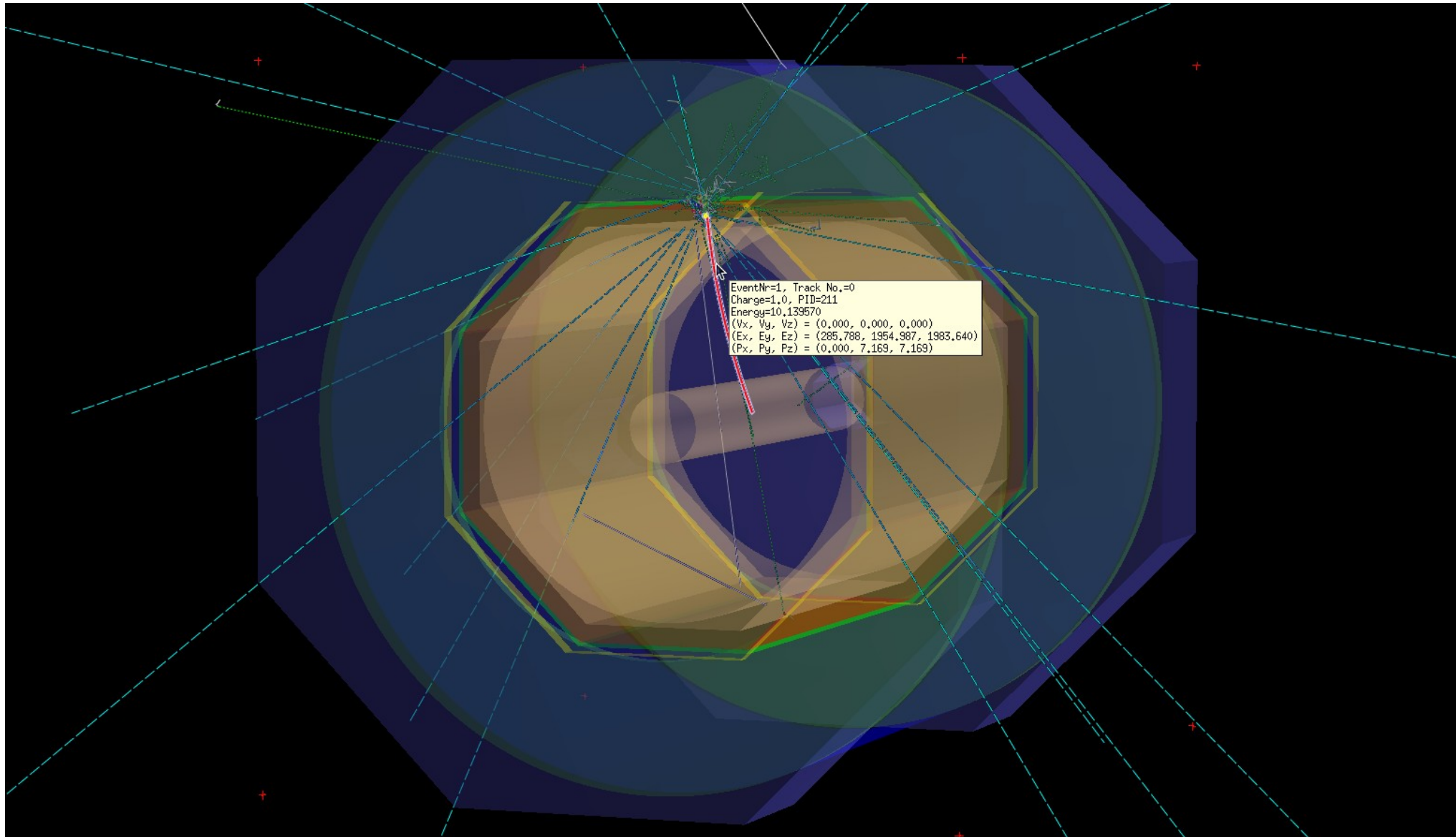


Current status

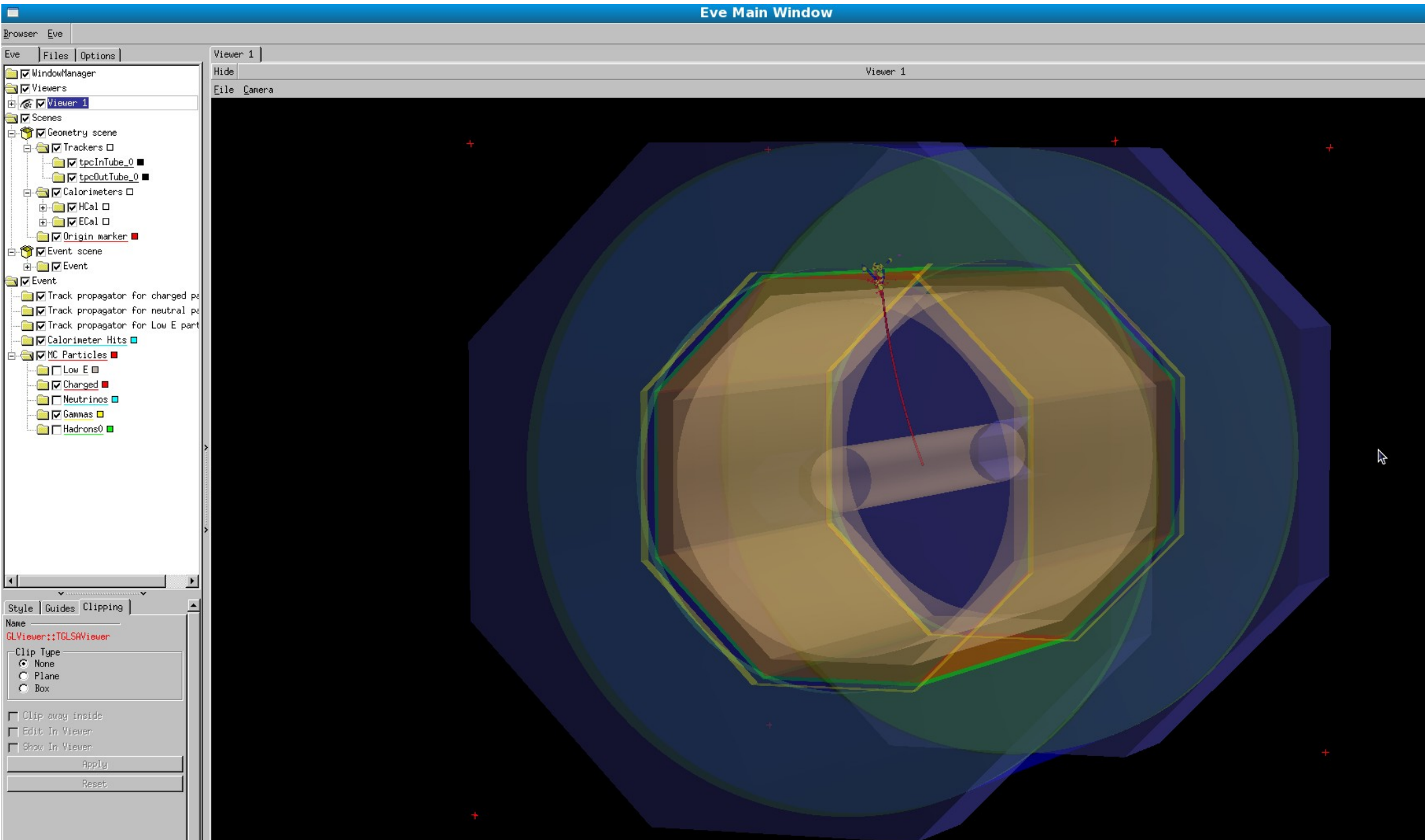


- Based on Root **TEve** classes, could display Calorimeter Hits and MCParticle (Tracks), especially, display shower detail with Mokka simulation
- Using gear file (to initialize the geometrical parameters) and slcio file as input;
- ILD00 Geometry available

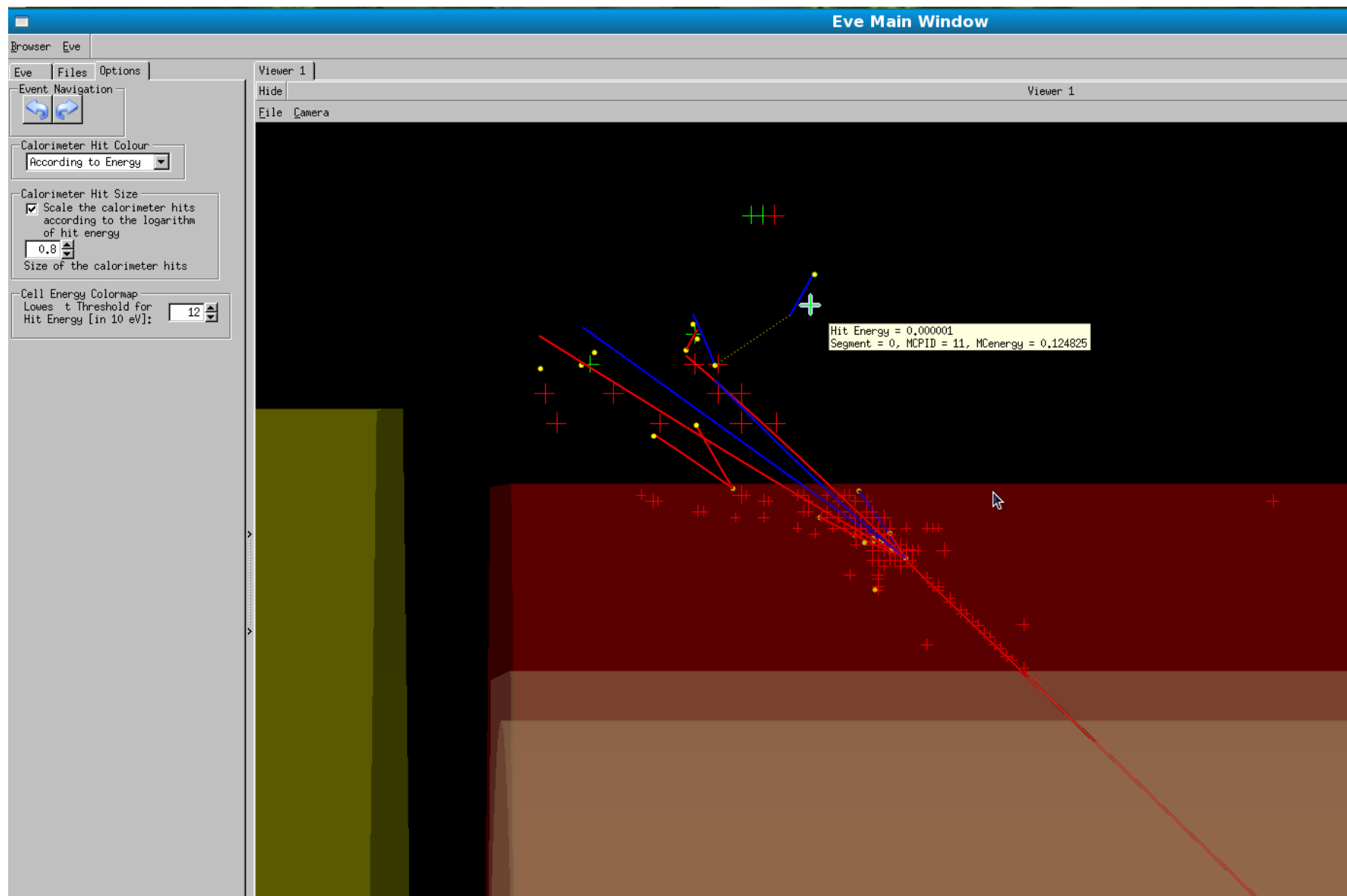
Event Display with 10GeV pion shot at 45 degree



Switch on/off event details: neutrinos, ect.

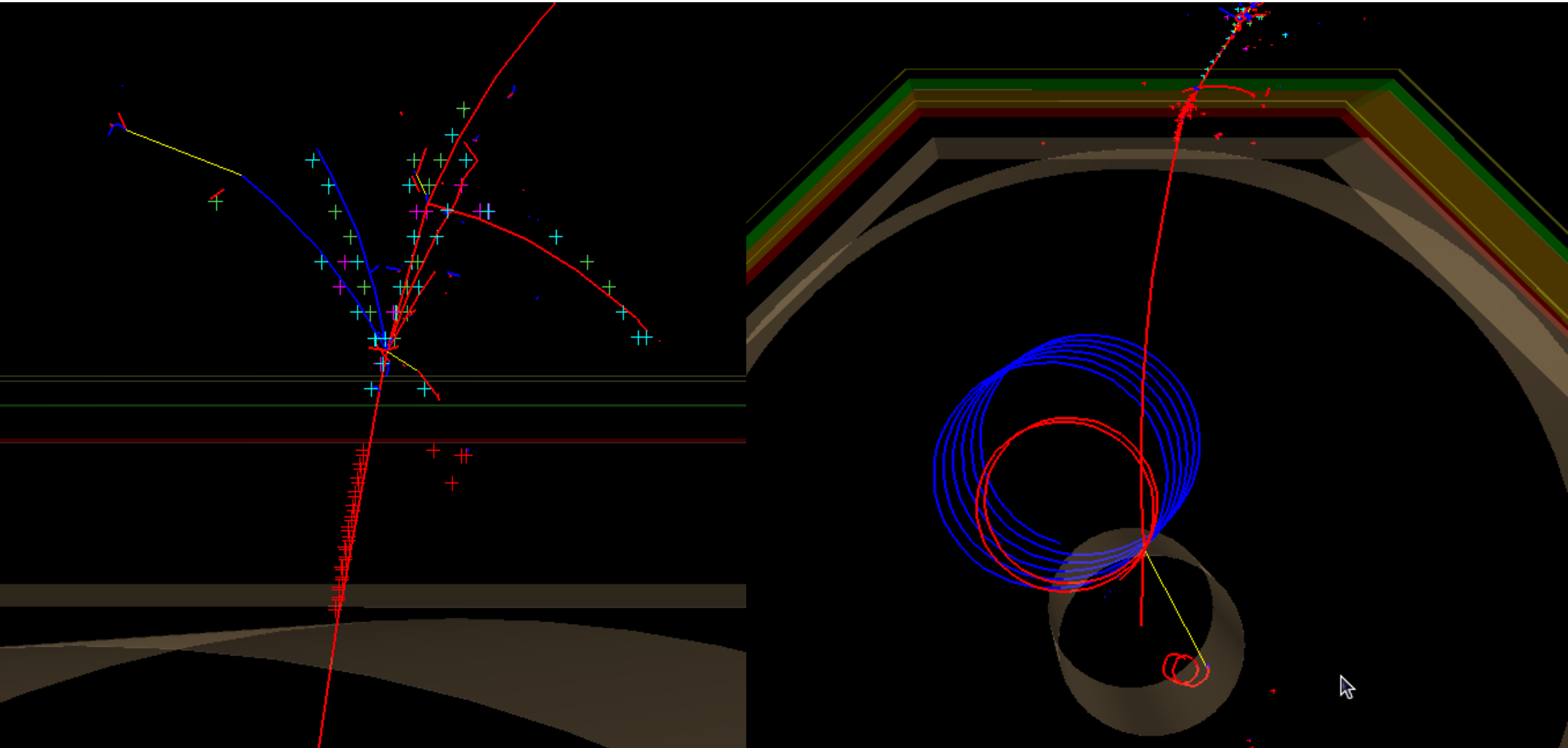


Options to show HCAL hits:



- Energy cut, Varying size & color according to energy, particle type;

More pictures...



To do list



- Code Cleaning & Bug fixing...
- Display other objects: trackers (TPC, VTX) hits, reconstructed particle...
- Implement other interested geometry (eg, TB)
- Improve user interface: eg, steering file with user defined flags to turn on/off event details (the full display would be quite slow)