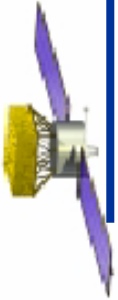


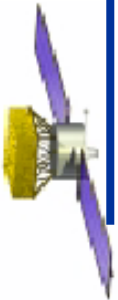
The role of ROOT in the BFEM Event Display

N. Lumb
I.N.F.N. - Pisa

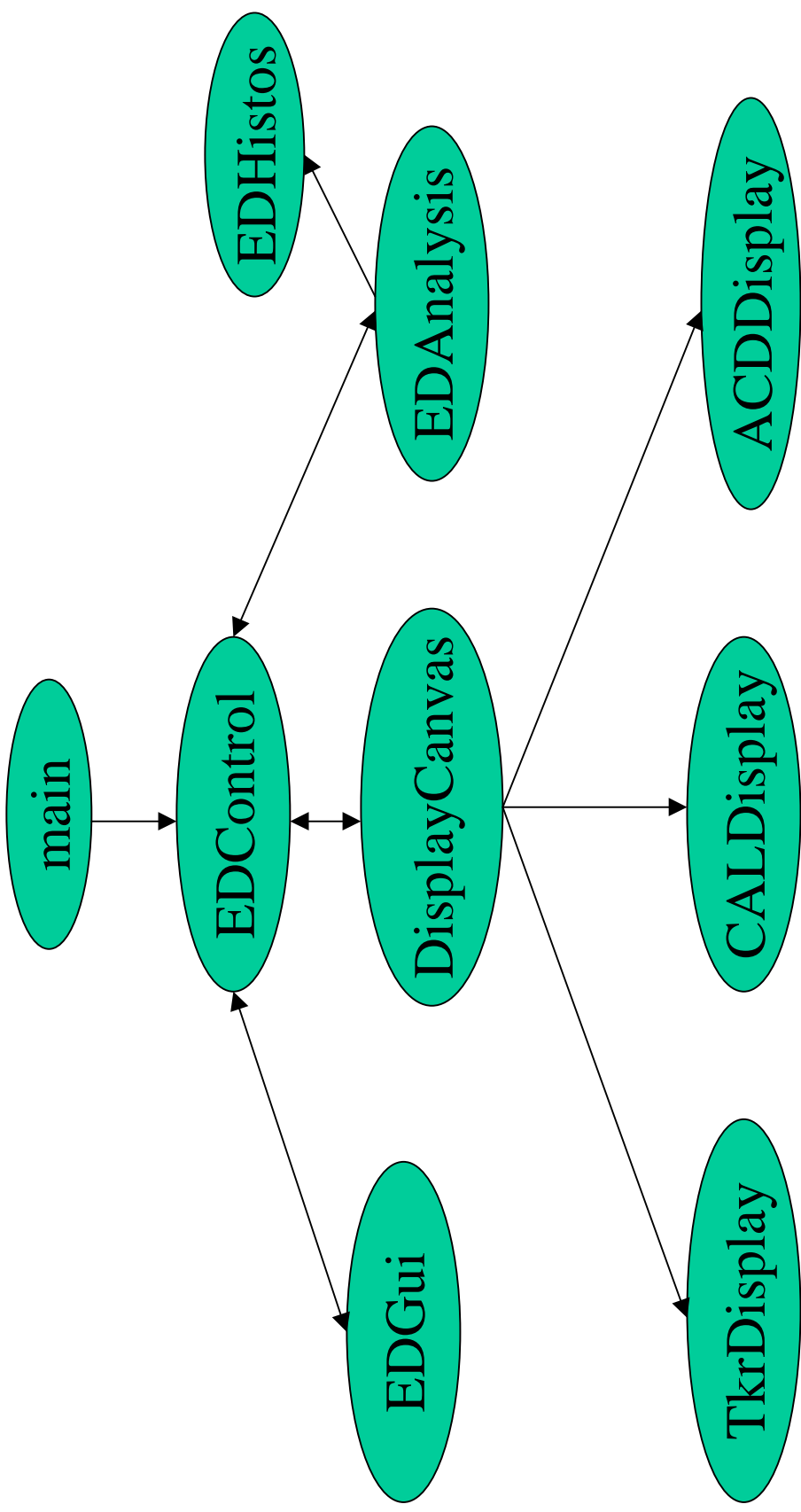


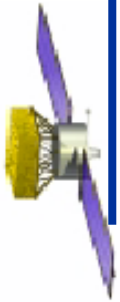
Status of the BFEM Event Display

- Transition from interpreted to compiled code
- Complete re-think of program design
- Largely transparent to the user, except:
 - Faster
 - More robust (hopefully – still a few bugs!)
- Easier for us to maintain
- First release today
- Runs under Linux ONLY!

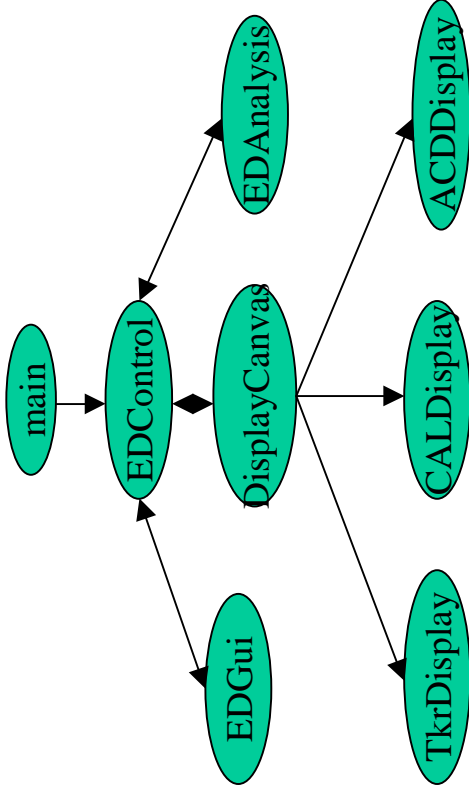


Program Structure





Event Display main classes



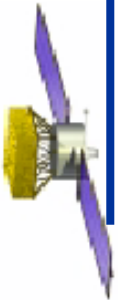
Main: ROOT set-up, starts overall control and Cint session (TRint)

EDControl: file management (Tfile), event control, response to GUI commands, overall control of display (using Tcanvas) and analysis

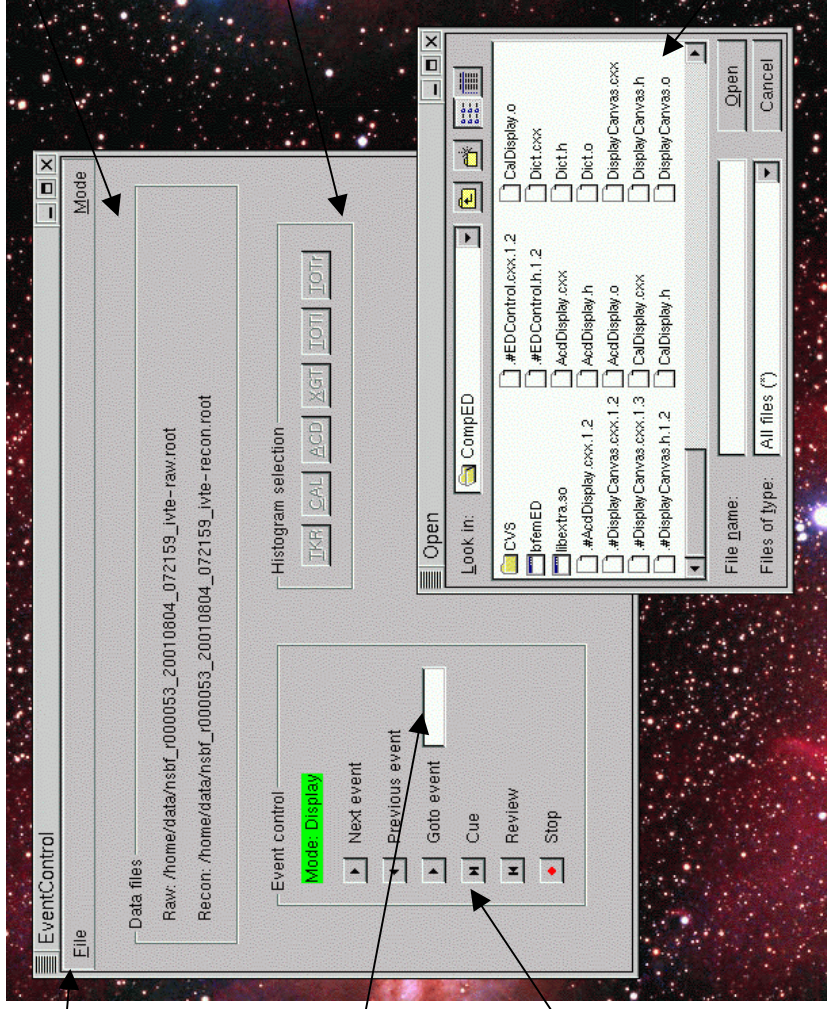
EDGui: Draws GUI using ROOT GUI classes (TFrame, TButton, TGMenuBar, etc. Responds to GUI events via ROOT ProcessMessage method

EDAnalysis: Analysis of raw data and display via EDHistos class.

DisplayCanvas: gets one event from file and displays on the canvas. Controls display sub-classes (TkrDisplay, etc.) Intensive use of TShape and TNode.



TGMainFrame



TGMenuBar

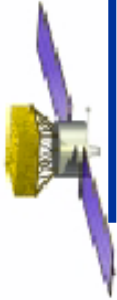
TGGroupFrame

TGTextEntry

TGButton

TGFileDialog

GLAST
Italia



Future plans

- Re-design of GUI, e.g. simpler event selection using TGSliderBar
- Port to Windows – create ROOT shared library?
- Support of XML detector geometry files.