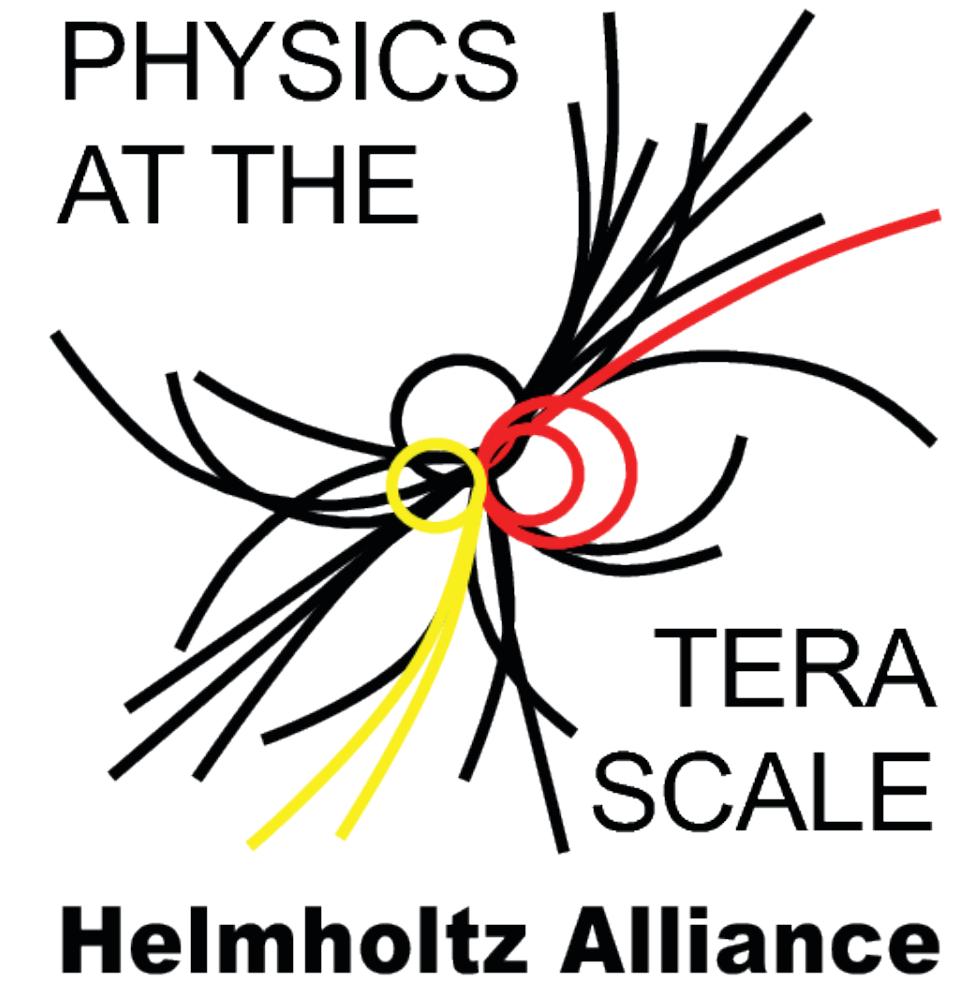


# The VISPA Project

## Developing Physics Analyses in a Visual Environment



M. Brodski, M. Erdmann, R. Fischer,  
 A. Hinzmann, T. Klimkovich, G. Müller,  
 T. Münzer, J. Steggemann, T. Winchen  
 Physics Institute 3A  
 RWTH Aachen University  
 contact: erdmann@physik.rwth-aachen.de

The VISPA program supports particle physicists and astroparticle physicists in their data analysis projects. VISPA combines elements of graphical and textual programming to enable fast development cycles of the analysis.

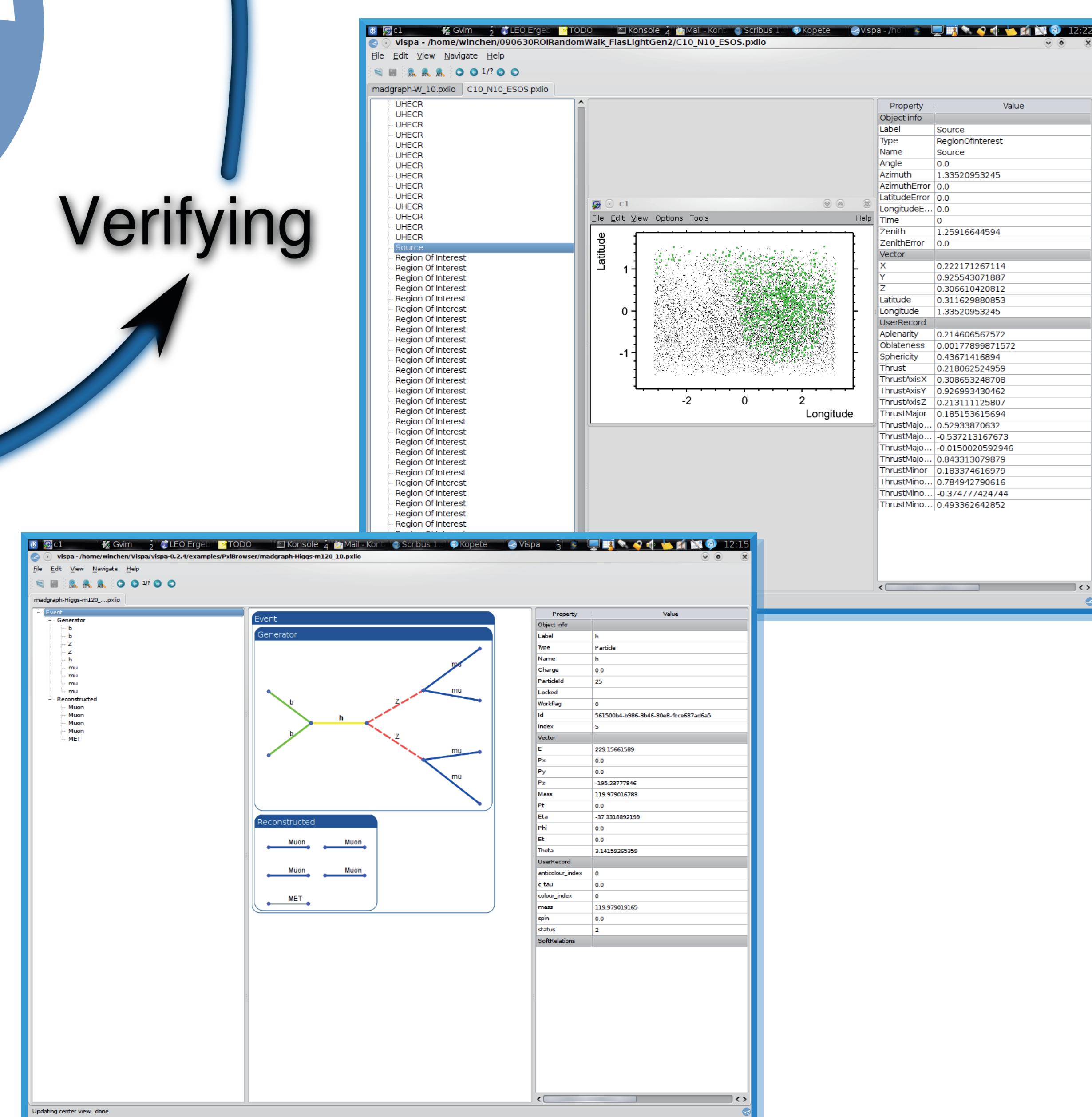
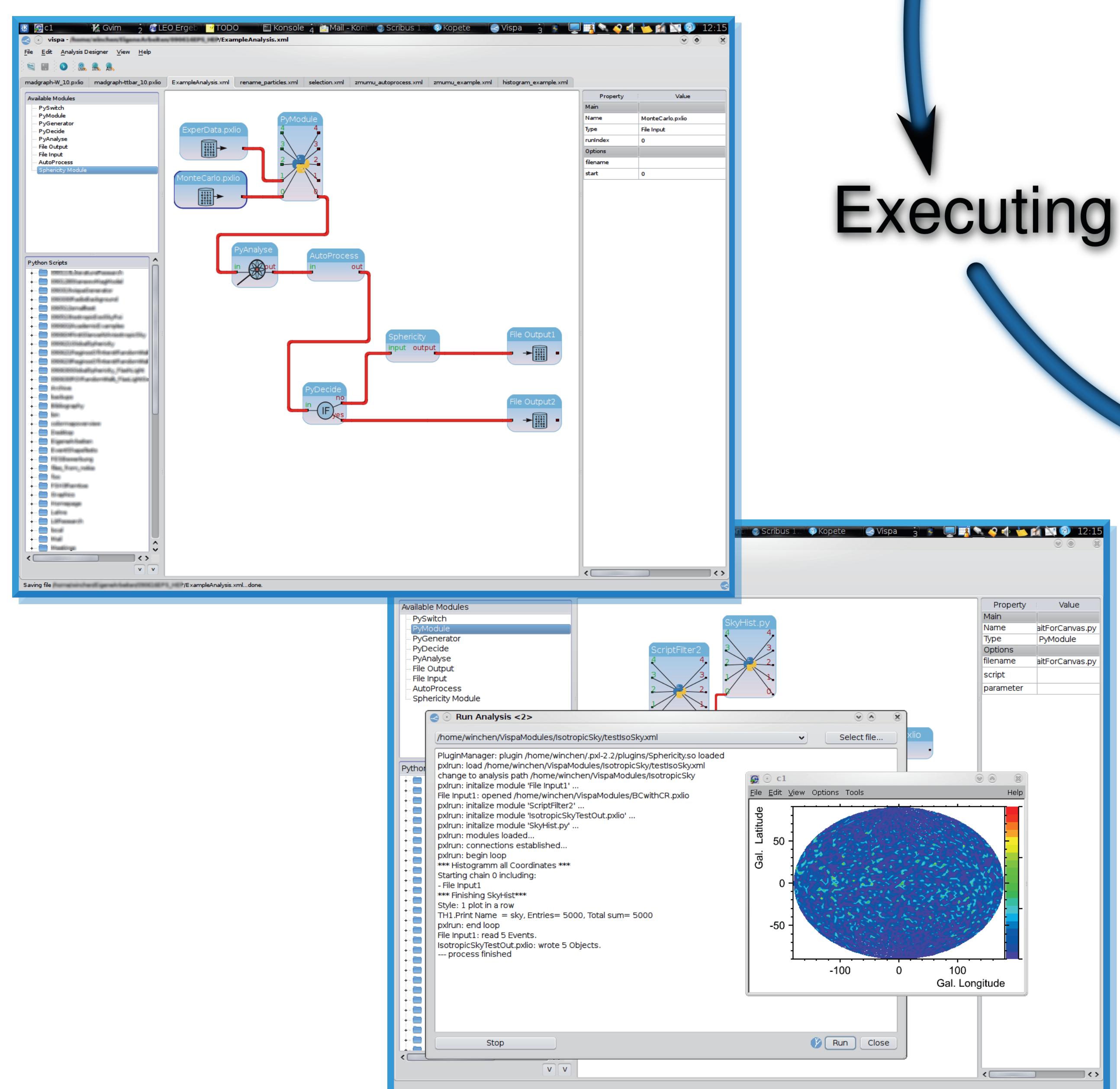
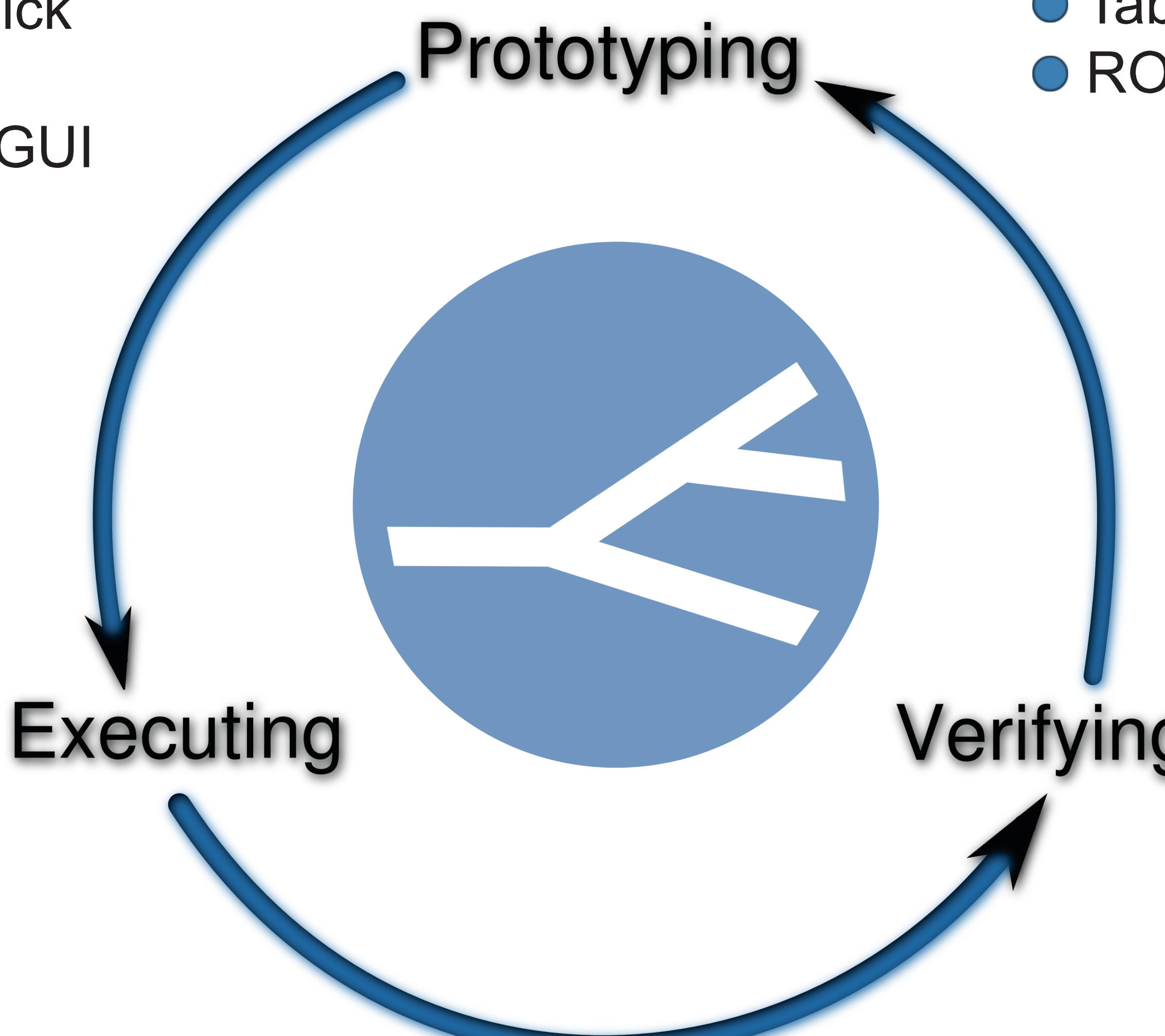
Supported with:  
 Allianz-Fellowship,  
 Allianz-Workshops

### Analysis Designer

- Design modular analysis in the GUI
- Combine individual modules written in C++ or Python
- Place individual modules per drag-and-drop
- Access Python code with double click
- Edit module parameters in the GUI
- Execute analysis directly from the GUI or the command line

### Data Browser

- Browse data in PXL format in the GUI
- Read containers individually from file
- Visualize decay trees
- Tabular display of object data
- ROOT plots of container content



### Physics eXtension Library

- C++ class and template collection
- Python interface PyPXL
- Currently facilitating High Energy and Astroparticle physics analyses
- Connections to ATLAS and CMS experiments in place
- Classes representing physics objects
  - Particle
  - Vertex
  - Collision
  - Cosmic Rays
  - ...
- Classes for physics interpretation (Eventview)
- Container classes holding physics objects and interpretation (Event)

### Platform-Independent Free Software

- Vispa and PXL are free software
- Download and Documentation from <http://vispa.sourceforge.net>
- Installers / binary packages available for Microsoft Windows, Mac OS X, Debian and Ubuntu Linux
- Conference Contributions  
 Talks: ICHEP 2008, IEEE 2008, ACAT 2008  
 Posters: CHEP 2009, EPS 2009

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