

Fable workbench, The Graphical User Interface (GUI) for FABLE

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Fable (Fully Automated BeamLine Experiments) is a framework for making TotalCryst experiments easy and efficient. It has been developed for doing grain mapping experiments in materials science at a synchrotron but could be applied to other types of experiments at synchrotrons or other sources e.g. neutrons.

Fable GUI has been developed for users who want to use TotalCryst programs to analyze their image data with a graphical interface.

Fable GUI is based on Eclipse Rich Client Application (RCP), which provides a “professional looking” application with native look and feel on multiple platforms.

One advantage is to have a set of different programs written in different languages to analyze crystallographic data combined into one application ; actually, 6 programs are using the GUI : PolyXSim, for far field simulations of polycrystals ; Preprocessor, to correct images ; Peaksearch ; Calibration of experimental geometry and Transformation ; Grainspotter, to index and assign diffraction spots to grains ; and finally ImageViewer .

Each program is represented by a plug-in, each plug-in having its own perspective (see figure 1.) ; in that talk, I will describe what a perspective is and I will show other functionalities like online and context help ; progress service, update mechanism, preferences, menu ...

In addition of these functionalities provided by eclipse RCP, fable GUI displays output files in table, 2D plot, 3D plots, editors and image tools available in ImageViewer which can be convenient for data analysis.

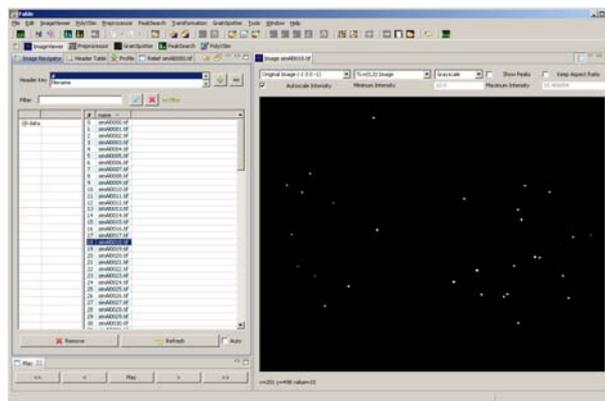


Figure 1: An example of the famous perspective ImageViewer used to display images in Fable workbench.

Fable is open-source released under the Gnu Public License and all documentations and programs for users programs, source code and coding rules for programmers are available at <http://fable.wiki.sourceforge.net/>. Though, programmer are welcome to add their own contribution, by adding new plug-ins to fable, or improving the GUI by either coding or reporting bugs.