



Contribution ID: 77

Type: **not specified**

LIMA: a generic framework for 2D detector data acquisition

Saturday, 7 July 2012 10:55 (25 minutes)

LIMA is a generic software Library for IMage Acquisition developed at the ESRF. Its main aim is to simplify the integration of an heterogeneous park of 2D detectors in large facilities by providing a common, high performance and control system independent software framework. Hardware optimisations in image manipulation are exploited whenever possible; the framework complements the eventually limited capabilities in the detector hardware with equivalent software alternatives. A modular design allows the extension of the library hardware interface and software functionality, including user-defined post-processing algorithms. Although still under development, LIMA is already deployed at the ESRF since more than 2 years, performing fast 2D data acquisition, basic processing/reduction and saving. An international collaboration was created spontaneously around LIMA, being adopted by 7 institutes and industrial suppliers. More than a dozen of detectors are currently integrated, half of them contributed by collaborating parties. The ESRF is in favour of pushing the existing collaboration towards a broader and more formalised development framework. Such developments would be oriented to make LIMA an even more easily accessible and usable tool, with the potential of becoming a standard for 2D detector manufacturers and the research community.

Primary author: Mr ALEJANDRO A., Homs-Puron (ESRF)

Co-authors: Mr PAPILLON, Emmanuel (ESRF); Mr CLAUSTRE, Laurent (ESRF); Mr PETITDEMANGE, Sebastien (ESRF)

Presenter: Mr ALEJANDRO A., Homs-Puron (ESRF)

Session Classification: Data acquisition and data handling