Thursday, 20 October 2016

V. Armando Solé (ESRF): **Course of XRF data analysis by PyMca Toolkit**

Friday, 21 October 2016

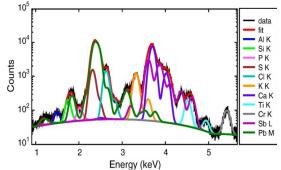PyMca at Max IV "today and future" & V. Armando Solé (ESRF): **The silx software toolkit**

Thursday, 20 October 2016, 9:00-17:00, **Event web page**

V. Armando Solé (ESRF): Course of XRF data analysis by PyMca Toolkit
pymca.sourceforge.net

PyMca is an X-ray Fluorescence Toolkit developed by the ESRF Software group. For an end user, PyMca is a ready to use, and in many aspects state-of-the-art, set of applications implementing most of the needs of X-ray fluorescence data analysis. For a developer, the PyMca Toolkit is a collection of Python tools for visualization and analysis of energy-dispersive X-ray fluorescence data.

Because of its general usability PyMca is packaged and installed in Max IV beamlines also as an HDF5 datasets browser and visualization tool. Max IV has developed for an initial commissioning phase PyMca plugins for online data visualization from Max IV detectors.

Armando Solé, head of ESRF data analysis unit, is in charge of maintaining and developing scientific software for ESRF. His scientific background is in spectroscopy and analytical chemistry. He developed several software tools for XRF mapping, tomography and X-ray absorption spectroscopy.

The PyMca training will cover:
- fundamentals of quantitative XRF analysis
- instrumental effects in XRF data: calibration, background, pile-up, escape peaks, absorption, line shape and other corrections
- spectral decomposition, common software and algorithms used
- practical training on using PyMca toolkit with real data

- It is a **"whole day" training** with software installed in your laptop. (Thu, 20 October, 9:00-17:00 at Max IV)
- For sure **this training is not needed to use PyMca just for simple HDF5/NeXus browser or plotting.**
- It is not a course in programming.

Friday, 21 October 2016, 9:30-12:00, **Meeting web page**

PyMca at Max IV "today and future" & V. Armando Solé (ESRF): The silx software toolkit
www.silx.org

The silx Toolkit presents recent ESRF development of tools to maintenance and simplify development of scientific applications. Well-known ESRF applications like FabIO, pyFAI and PyMca are expected to base their graphical user interfaces on this library in order to reduce and to share maintenance efforts.

Presentation of Armando S. and Max IV plugins is intended more for programmers looking for GUI frameworks for Scientific applications they are developing. This is an open meeting (registration not required).

Contact: Zdeněk Matěj (KITS - Scientific software), zdenek.matej@maxiv.lu.se

For the PyMca course please register at the email above or in Indico (Number of participants is limited).