Savu - DLS Large Data Processing Framework
Max IV, 28 - 29 September 2017

Thursday, 28 September 2017
Nicola Wadeson and Mark Basham (DLS): **Introduction to Savu**

Friday, 29 September 2017
Nicola Wadeson (DLS), Mark Basham (DLS) & MAX IV compute: **Hands on Savu**

The Savu framework is a reconstruction and data processing pipeline for large volume datasets developed by Data Analysis Group at the Diamond Light Source (DLS). *Savu* originates in a tomography community, however it is designed to allow greater flexibility and be adopted for other types of experimental data processing as azimuthal integration in powder diffraction and SAXS or phase retrieval in coherent diffraction imaging. It is easily extendible by means of plugins that can make use of other scientific data software or adopt for a particular data format. Savu is a python package that can be used on laptops but it also heavily utilizes parallel computing and hdf5 to bypass memory limitations and is very suitable for HPC environments.

Nicola Wadeson and *Mark Basham* (DLS) are coming to present recent *Savu* developments and help to optimize *Savu* for MAX IV compute environment.

Savu on GitHub: https://github.com/DiamondLightSource/Savu

Thursday, September 28 (MAX IV room Ia-Ib):

10:30 - 11:00 - N. Wadeson & M. Basham: General introduction to Savu
11:15 - 11:35 - Savu demo
11:35 - 11:55 - Viktor Nikitin (MAX IV) - lprecon

13:30 - 14:30 - Hands on Savu: Example data

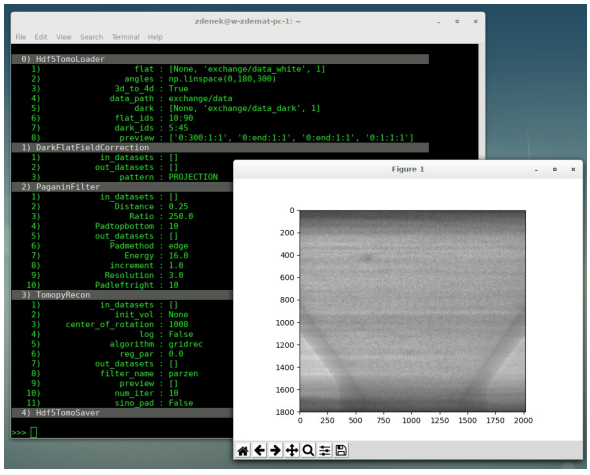
Friday, September 29 (MAX IV room II):

10:30 - 11:30 - Hands on writing a Savu plugin
13:30 - 14:30 - Hands on Savu: Building a process list
14:50 - 15:30 - Summary and possible collaborations

MAX IV event page: http://indico.maxiv.lu.se/e/Savu2017

Small workshop covers:

- Savu presentation by its developers
- reports about fast tomography reconstruction algorithms developed at LU and MAX IV and an overview of MAX IV compute environment
- hands on sessions on Savu
  (registration needed only for external visitors, email)
- working sessions on optimization of Savu installation in MAX IV compute environment
  (registration needed for this part, email)



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External visitors are kindly asked to register via the email above or in Indico.