



SATELLITE WORKSHOP – Photon Science

Introduction to PYDIDAS: A new tool for automated diffraction data analysis

Thursday, 25 January 2024

Hereon has developed the PYDIDAS software (pydidas.hereon.de) suite for X-ray diffraction data analysis to help existing users with a more streamlined data analysis and also to attract new user groups who do not have the technical experience to perform the required processing with existing tools. PYDIDAS is explicitly designed to allow full data analysis in a single tool, to natively process modern data container types (HDF5.) and to make efficient use of parallel computing. Data browsing and display, experiment calibration, workflow setup, processing and visualization are all available from within the software which runs both as an analysis service at our beamlines and also as a local installation.

This workshop will give an introduction into PYDIDAS in the form of an assisted training on the participants' computers.

Due to the large number of registrations, the workshop must be held less interactively than originally intended. However, all participants are still welcome to bring their computers and to get some hands-on training during the workshop. Instructions for preparations will be distributed some days in advance of the workshop.

Organiser: M. Storm

Contact: malte.storm@hereon.de

Note that times are not intended as a fixed schedule but only approximate estimates.

9:30	Welcome and introduction talk to pydidas	Malte Storm
9:50	Presentation: Working with the pydidas UI	Malte Storm
10:05	Presentation: Use Case: Nano indentation experiment	Malte Storm
10:10	Practical: Data analysis in nano indentation experiment	Malte Storm / all
10:45	Coffee break	
11:00	Practical part II: Data analysis in TiAl pillar sample	Malte Storm / all
11:45	Wrap-up and feedback	all
12:00	End of workshop	