

	TUTORIAL TITLE	ORGANISERS	TIME		MAX. PARTICIPANTS	EQUIPMENT REQUIRED / INSTRUCTIONS FOR PARTICIPANTS
T1	BAG Meeting	David Flot Christoph Mueller-Dieckmann Deborah Davison	8:50 - 12:30		no limit	
T2	Structural Biology Tutorials	Daniele De Sanctis Gianluca Santoni	13:15 - 15:00	T2A. Remote data collection with EXI and MXCuBE3	no limit	
		Didier Nurizzo Matthew Bowler	15:00 - 16:30	T2B. Getting the best out of MASSIF-1 and workflows at the ESRF	no limit	
T3	Volume image analysis	Alexander Rack	9:00 - 17:00		50	User should have example data sets available, ideally submitted in advance
T4	Spectroscopy data analysis and calculations using the Jupyter notebook	M. Retegan	9:00 - 12:00		10	Personal computer to connect to https://jupyter-slurm.esrf.fr .
T5	Darfix: A data analysis package for Dark Field X-ray Microscopy	Julia Garriga	9:00 - 12:00		20	Pc to connect to slurm or with access to a linux OS with python 3.8.
T6	How to use videos for science communication	Montserrat Capellas	12:15 - 13:00		no limit	
T7	Laue microdiffraction	Jean-Sébastien Micha	8:45 - 12:00		20	Installation of LaueTools software + possibility of the need for PC to connect to jupyter-slurm or slurm
T8	Data reduction for scattering experiments	Jérôme Kieffer	9:00 - 12:00	T8A. Introduction to pyFAI and hands-on to calibrate a SAXS and WAXS experiment together with data reduction for a diffraction mapping experiment. Suitable for beginners, no prerequisites	20	Local installation of the software, instructions will be given one week before the tutorial.
			13:30 - 16:30	T8B. Advanced tutorial on the separation of the background scattering from Bragg peaks with application to compression of single crystal diffraction and serial crystallography.	20	
T9	XAS data analysis	Kirill Lomachenko	9:00 - 12:00	Introduction to XAS: The Whys, The Whats and The Hows	no limit	
		Yves Joly	13:30 - 16:30	1. Introduction on XANES, X-ray Raman and valence to core X-ray emission spectroscopy,	12	Package with a software will be provided and participants must have a software for plotting (Origin, Keleidagraph... NOT Excel).
		Francesco d'Acapito		2. Introduction on how to do a quantitative XAS data analysis	12	PC with DEMETER installed
T10	XPCS: X-ray Photon Correlation Spectroscopy	Federico Zontone Yuriy Chushkin Beatrice Ruta	10:00 - 12:00		25	
T11	Hands on BLISS, the new ESRF experiments control software	Matias Guizarro	14:00 - 17:00		50	
T12	Coherent imaging analysis with PyNX	V Favre-Nicolin Steven Leake J. Carnis (DESY) M-I. Richard (CEA) D. Simonne (Soleil)	9:00 - 16:30		15	Computer to connect to jupyter-slurm.esrf.fr