

MATRAC 1 School Programme, 12 to 17 March 2023 in Lauenburg/Hamburg (Germany) and Lund (Sweden)

Time	Sunday, 12.03.2023	Monday, 13.03.2023	Tuesday, 14.03.2023	Wednesday, 15.03.2023	Thursday, 16.03.2023	Friday, 17.03.2023
	Lauenburg (Zündholzfabrik)	Lauenburg (Zündholzfabrik)	Hamburg (PETRA III@DESY)	Lund (LINXS)	Lund (MAX IV and ESS)	Lund (LINXS)
09:00-09:45		Fundamentals of neutron scattering and the application of synchrotron radiation - Properties of neutrons and photons, scattering theory (Martin Müller)	<b>Practical at PETRA III:</b> P03 (Scanning Nanodiffraction) P05 (Imaging, Nano-Tomography) P07 (Dilatometer) P07B (Residual Stress) P21 (In-situ SAXS/WAXS) P61A (Strain Scanning, Energy dispersive diffraction) Evaluation station (pydidas software)  09:00 – 12:30 13:30 – 17:00  18:00 Bus Departure	Coherence in Synchrotron Radiation (Aymeric Robert)	<b>Practical at MAX IV:</b> Balder (XAS, XES) CoSAXS (SAXS) DanMAX (Powder X-ray diffraction) ForMAX (Imaging, SWAXS)  09:00 – 12:00 13:00 – 16:00  <b>Parallel guided tours to ESS</b>  16:00 - 17:45 Preparation of Presentations on Friday (Results of experiments)  18:00 Bus Departure (to Restaurant)	Molecular Biophysics (Trevor Forsyth)
10:00-10:45		Engineering Materials Science (Ulrich Lienert)		SAXS, Reflectivity (Ann Terry)		Results of experiments
11:15-12:00		Scattering Theory, Correlation Functions (Ella Schmidt)		Combining full-field tomographic imaging with scattering techniques (Kim Nygård)		Scattering techniques for the development of new materials from the forest (Daniel Söderberg)
12:15-13:00		Structure Determination (Ella Schmidt)		X-ray Spectroscopy (Jan Erik Rubensson)		Final discussion and Lunch
13:00-14:15		Lunch		Lunch		13:30 Bus Departure (to Copenhagen Airport and Hamburg Central Station)
14:15-15:00		Real Structure, Defects and Residual Stress (Reinhard Neder)		Ultrafast studies (Jörgen Larsson)		
15:15-16:00		Nanodiffraction (Christina Krywka)		Coherent Imaging (Pablo Villanueva Perez)		
16:15-17:00		Imaging (Imke Greiving)		Synchrotron methods for surfaces (Lindsay Richard Merte)		
17:15-18:00	Arrival of participants and dinner (18:00)	Introduction and Preparation of Experiments at MAX IV (Franz Hennies)				
19:00-19:45	Introduction into Scattering (Martin Müller)					
20:00-22:00	Get-Together	Posters	Transfer to Lund (Bus/Ferry)			