RÅC INTERNATIONAL SUMMER SCHOOL 2026
Advanced Materials Design at X-ray and Neutron Facilities

Topic / Time	Sunday 16/8	Monday 17/8	Tuesday 18/8	Wednesday 19/8	Thursday 20/8 – Excursion		Friday 21/8	Saturday 22/8	Sunday 23/8	Topic / Time
	ARRIVAL	From Global Challenges to Scientific Tools	Materials Design and Synthesis: *From Atoms to Functional Systems*	Probing Materials Across Length and Time Scales: *Experimental Techniques I*	Exploring Large-Scale Research Facilities: From Access to Impact		Probing Materials in Real Time and Extreme Conditions: *Experimental Techniques II*	From Experiment to Insight: *Data-Driven Science, Interpretation, and Research Integrity*	DEPARTURE	
07:00 – 07:15					*Pickup Breakfast Bag*					07:00 – 07:15
07:15 – 07:30										07:15 – 07:30
07:30 – 07:45		BREAKFAST					BREAKFAST	BREAKFAST		07:30 – 07:45
07:45 – 08:00										07:45 – 08:00
08:00 – 08:15										08:00 – 08:15
08:15 – 08:30										08:15 – 08:30
08:30 – 08:45		Short Welcome			Bus Transfer to Lund (bus leaves 07:30)					08:30 – 08:45
08:45 – 09:00		Opening Keynote 1 ***Living well within Limits*** Julia Steinberger (University of Lausanne)	**From Atoms to Solids**: *Bonding, Structure, and Materials Formation* Richard Dronskowski	**Atomic Structure and Diffraction**: *From Crystals to Scattering Patterns* Elisabetta Nocerino (SU)			**Frontiers in Neutron Imaging:** *From Phase Contrast to Dark-Field Techniques* Markus Strobl (ILL)	**Probing Materials Under Extreme Conditions:** *Low Temperature, High Field, and High Pressure* Elizabeth Blackburn (LU)	Check-out from Hotel (latest 11:00)	08:45 – 09:00
09:00 – 09:15										09:00 – 09:15
09:15 – 09:30				**Small-Angle Scattering**: *Probing Structure Across Length Scales* Sebastian Jaksch (ESS)						09:15 – 09:30
09:30 – 09:45										09:30 – 09:45
09:45 – 10:00		Keynote 2 ***Sustainable Energy in Bullerbyn 2.1*** Björgvin Hjörvarsson (Uppsala University)								09:45 – 10:00
10:00 – 10:15			FIKA	FIKA	Arrival FIKA at LINXS		FIKA	FIKA		10:00 – 10:15
10:15 – 10:30				**The Reflectometry Showdown**: *X-rays vs. Neutrons* Björgvin Hjörvarsson (UU) + Thomas Hase (Univ. Warwick)	***MAX IV***: *Next-Generation Synchrotron for Materials Research* Olof Karis		**In Situ and Operando Studies of Interfaces in Energy Materials** Julia Maibach (Chalmers)	**Muon Spin Rotation & Relaxation:** *Probing Dynamics in Energy Materials* Martin Månsson (KTH)		10:15 – 10:30
10:30 – 10:45			**From Powders to Crystals**: *Practical Aspects of Materials Synthesis & Crystal Growth* Sabine Wurmehl (IFW Dresden)							10:30 – 10:45
10:45 – 11:00		FIKA			***Welcome to LINXS*** Trevor Forsyth					10:45 – 11:00
11:00 – 11:15	ARRIVAL + REGISTRATION	Keynote 3 **Spintronics and Quantum Devices for a Sustainable Future** Mathias Kläui (Joh. Gut. University Mainz)						**From Experiment to Autonomous and Data-Driven Materials Discovery** Andy Sode Anker (DTU)		11:00 – 11:15
11:15 – 11:30			**Thin Films and Multilayers**: *From Deposition to Function* Anjana Devi (IFW/TU Dresden)	**Neutron and X-ray Imaging of Materials:** *From 2D Projections to 3D Tomography* Nikolay Kardjilov (HZB)						11:15 – 11:30
11:30 – 11:45					***The European Spallation Source***: *Neutron Science for the Future* Giovanna Fragneto		**Inelastic and Quasielastic Neutron Scattering:** *An Introduction* Wiebke Lohstroh (TUM)			11:30 – 11:45
11:45 – 12:00								***The Large-Scale Ecosystem*** Lisbeth Olsson (VR)		11:45 – 12:00
12:00 – 12:15		LUNCH			LUNCH @ LINXS + Group Photo		LUNCH			12:00 – 12:15
12:15 – 12:30								LUNCH		12:15 – 12:30
12:30 – 12:45										12:30 – 12:45
12:45 – 13:00										12:45 – 13:00
13:00 – 13:15					Transfer to ESS/MAX IV					13:00 – 13:15
13:15 – 13:30										13:15 – 13:30
13:30 – 13:45		**Large-Scale Research Infrastructures**: *Crucial Tools for Societal Challenges* Ana Buzanich (BAM)	Lecture + Tutorial **Computational Materials Design**: *Dynamics at Surfaces and Interfaces* Christoph Scheurer (FHI)	**Ultrafast X-ray Techniques for Materials Science** + **Nonlinear X-ray Science**: *Novel Probes and the Splitting / Mixing of X-ray Photons* Christina Bömer (DESY)	**MAX IV Tour** Group #1	**ESS Tour** Group #2	**Hydrogen in Materials:** *Insights from Operando Neutron Scattering* Wiebke Lohstroh (TUM)	**Machine Learning Approaches in Materials Modelling and Design** Pol Febrer (EPFL)		13:30 – 13:45
13:45 – 14:00										13:45 – 14:00
14:00 – 14:15							**Spin-Echo SANS**: *Probing Structure and Dynamics in Sustainable Food Systems* Wim Bouwman (TU Delft)			14:00 – 14:15
14:15 – 14:30		**Synchrotron and Free-Electron Laser Techniques**: *An Introduction* Sakura Pascarelli (European XFEL)			Switch of Groups / Location (Transfer)			**Beyond AI Solutionism:** *Scientific Judgment, Responsibility, and Sustainability* Nolen Gertz (Univ. Twente)		14:15 – 14:30
14:30 – 14:45										14:30 – 14:45
14:45 – 15:00										14:45 – 15:00
15:00 – 15:15		**Neutron Scattering Techniques**: *An Introduction* Victoria Garcia Sakai (ISIS)	**High-Pressure Synthesis**: *Stabilizing Novel Materials under Extreme Conditions* Aleksandra Krajewska (MPI)	FIKA / FREE TIME	**MAX IV Tour** Group #2	**ESS Tour** Group #1	Lecture + Tutorial **Error Analysis:** *Uncertainty and Data Interpretation in Experiments* Thomas Hase (University of Warwick)	**Research Integrity in Practice:** *Data, Publishing Ethics, and AI* Andrew Bissette (Cell Press)		15:00 – 15:15
15:15 – 15:30										15:15 – 15:30
15:30 – 15:45										15:30 – 15:45
15:45 – 16:00		FIKA / FREE TIME	FIKA / FREE TIME		Transfer Back to LINXS + FIKA			FIKA		15:45 – 16:00
16:00 – 16:15	Check-in to Hotel (from 16:00) + REGISTRATION			**ARPES and TARPES**: *Probing Electronic Structure and Dynamics* + **Ultrafast Dynamics in Quantum Materials**: *Insights for Future Functional Materials* Kai Rossnagel (Uni Kiel / DESY)						16:00 – 16:15
16:15 – 16:30								Workshop **Presenting Your Research**: From Complexity to Clarity Anders Sahlman		16:15 – 16:30
16:30 – 16:45										16:30 – 16:45
16:45 – 17:00		**Muon-Based Techniques**: *An Introduction* Hans-Henning Klauss (TU Dresden)	**Nature's Synthesis Lab**: *Bio-based Materials* Yuanyuan Li (KTH)		**TUTORIAL**: **How to Write a Competitive Beamtime Proposal**: *From Idea to Successful Application* Martin Månsson (KTH)		FIKA / FREE TIME			16:45 – 17:00
17:00 – 17:15										17:00 – 17:15
17:15 – 17:30										17:15 – 17:30
17:30 – 17:45	Welcome Speech + Info and Practicalities	**Who Are You at Work?** *Personality, Self-Assessment, and Collaboration in Research* Adrian Furnham (UCL)	**Leadership and Group Dynamics in Research:** *Myths, Challenges, and Realities* Mats Alvesson (Lund Univ.)	**The Career Odyssey** Martin Månsson (KTH)	**Inside the Nobel Prize in Physics:** *History, Nomination and Selection Process* Olle Eriksson (UU / KVA)		***Science Slam***			17:30 – 17:45
17:45 – 18:00										17:45 – 18:00
18:00 – 18:15										18:00 – 18:15
18:15 – 18:30										18:15 – 18:30
18:30 – 18:45	Welcome Reception	Buffet Dinner at the Hotel	Buffet Dinner at the Hotel	Buffet Dinner at the Hotel	Dinner in Lund (at LINXS)		**Walk to Dinner Restaurant** (1.5 km, 15 mins Walk)	Dinner at Hotel Awards Formal Closing		18:30 – 18:45
18:45 – 19:00							Gala Dinner at **"Fästningsterassen"** Fästningsterrassen 1 432 44 Varberg www.fastningsterrassen.se			18:45 – 19:00
19:00 – 19:15										19:00 – 19:15
19:15 – 19:30										19:15 – 19:30
19:30 – 19:45										19:30 – 19:45
19:45 – 20:00										19:45 – 20:00
20:00 – 20:15										20:00 – 20:15
20:15 – 20:30										20:15 – 20:30
20:30 – 20:45										20:30 – 20:45
20:45 – 21:00			Poster Session I	Poster Session II	Bus transfer back to Varberg (bus leaves 20:30)					20:45 – 21:00
21:00 – 21:15	Free Time	Free Time						***Cultural Evening***		21:00 – 21:15
21:15 – 21:30										21:15 – 21:30
21:30 – 21:45										21:30 – 21:45
21:45 – 22:00										21:45 – 22:00