



NEPHEWS - Virtual Training

Monday, November 24th and Tuesday, November 25th, 2025

Zoom registration link:

<https://us06web.zoom.us/join/AR0iNE1wQwCXxQuYd8gqkw>

Agenda

Monday, November 24th		
Time (CET):	Topic + title	Chair/Speaker
Session 1		
09:00-09:01	Welcome from chair	Rosen Georgiev (NEPHEWS & TCD)
09:01-09:15	Introduction to NEPHEWS Virtual Training	Rosen Georgiev (TCD)
09:15-09:45	The synchrotron and FEL landscape in Europe	Cormac McGuinness (ESUO President)
09:45-10:15	The neutron landscape in Europe	Astrid Schneidewind (ENSA chair)
10:15-10:30	 Break	
10:30-11:30	Introduction to X-rays as a probe of matter, materials and processes	Luigi Paolasini (ESRF)
11:30-12:00	Synchrotron X-ray Absorption Spectroscopy – insights into experimental techniques and science examples	Alexey Maximenko (SOLARIS)
End of Session 1		
12:00-13:30	Lunch	
Session 2		
13:30-13:31	Welcome from chair	Mark Johnson (ILL)
13:31-14:30	Introduction to neutrons as a probe of matter, materials and processes	Mark Johnson (ILL)
14:30-15:00	Neutron diffraction – introduction and examples	Navid Qureshi (ILL)
15:00-15:30	Small angle neutron scattering and neutron reflectometry	Andrew Jackson (ESS)
15:30-15:45	 Break	
15:45-16:15	Neutrons spectroscopy	Speaker - tbc
16:15-16:45	Nuclear and particle physics – introduction and examples	Bastian Märkisch (Tech. Uni. Munich)
16:45-17:15	tbd	tbd
End of Session 2		

Agenda

Tuesday, November 25th		
Time (CET):	Topic + title	Chair/Speaker
Session 3		
09:00-09:01	Welcome from chair	Marcin Sikora (SOLARIS)
09:01-09:30	An introduction to resonant inelastic x-ray scattering (RIXS)	Giacomo Ghiringhelli (U. Pol di Milano)
09:30-10:00	Experiments at large scale facilities and FAIR and open data, practice and workflows in X-ray science	Bridget Murphy (CAU Kiel)
10:00-10:30	Synchrotron X-ray Diffraction – an emphasis on powder diffraction	Andy Fitch (ESRF)
10:30-11:00	Synchrotron X-ray imaging and computed tomography	Kudakwashe Jakata (Diamond Light Source)
11:00-11:15	 Break	
11:15-12:15	Introduction to Femtosecond X-ray Experiments at X-ray Free Electron Lasers and Digital Twin	Christian Bressler (EuXFEL, Universität Hamburg)
12:15-12:45	Infrared FELs, their applications and science examples	Stephan Winnerl (Helmholtz Zentrum Dresden Rossendorf)
12:45-13:15	Neutron imaging – introduction and examples	Markus Strobl (Paul Scherrer Institut)
End of Session 3		
13:15-14:30	Lunch	
Session 4		
14:30-14:31	Welcome from chair	Piotr Piwowarczyk (SOLARIS)
14:31-15:30	Accessing beamtime at large scale facilities through NEPHEWS – access modes and proposal writing	Giovanna Cicognani (ILL), Rainer Lechner (Montanuniversitaet Leoben), Joanne McCarthy (ESRF)
15:30-16:00	Accessing beamtime at large scale facilities for new and non-expert users through NEPHEWS via User-Twinning	Philip King (UKRI/ISIS) Cormac McGuinness (ESUO/TCD)
16:00-16:30 Case studies	“Can neutrons help actinide science? A case study of aqueous thorium and uranium compounds”	Robert James Baker (Trinity College Dublin)
16:30-17:00	"Multi-edge EXAFS spectroscopy of high-entropy materials at Petra-III“	Alexei Kuzmin (University of Latvia)
End of Session 4		