NEPHEWS virtual training

Monday, February 3, 2025 - Tuesday, February 4, 2025

Online

Program

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Monday, February 3, 2025

Session 1: chair by tbd (9:00 AM - 9:01 AM)

Introduction to NEPHEWS virtual training by tbd (9:01 AM - 9:15 AM)

The synchrotron and FEL landscape in Europe by Cormac McGuinness (ESUO President) (9:15 AM - 9:45 AM)

The neutron landscape in Europe by Astrid Schneidewind (ENSA president) (9:45 AM - 10:15 AM)

Break (10:15 AM - 10:30 AM)

Introduction to X-rays as a probe of matter, materials and processes by Luigi Paolasini (ESRF) (10:30 AM - 12:00 PM)

Session 2: chair Mark Johnson (ILL) (1:30 PM - 1:31 PM)

Introduction to neutrons as a probe of matter, materials and processes by Mark Johnson (ILL) (1:31 PM - 2:30 PM)

Neutron diffraction – introduction and examples by Navid Qureshi (ILL) (2:30 PM - 3:00 PM)

Small angle neutron scattering and neutron reflectometry by Andrew Jackson (ESS) (3:00 PM - 3:30 PM)

Break (3:30 PM - 3:45 PM)

Neutron imaging – introduction and examples by Markus Strobl (PSI) (3:45 PM - 4:15 PM)

Neutrons as Probes for Soft Matter: Shinning the Beam on Cancer Cells and Burned Bones by Maria Paula Marques (Uni Coimbra - PT) (4:15 PM - 4:45 PM)

Nuclear and particle physics – introduction and examples by Bastian Märkisch (Tech. Uni. Munich - D) (4:45 PM - 5:15 PM)

Tuesday, February 4, 2025

Session 3: chair Marcin Sikora (SOLARIS) (9:00 AM - 9:01 AM)

Synchrotron X-ray Absorption Spectroscopy – insights into experimental techniques and science examples by Alexey Maximenko (SOLARIS) (9:01 AM - 9:30 AM)

Synchrotron Photoemission spectroscopy – from core levels, to environments by Norbert Koch (Humboldt University) (9:30 AM - 10:00 AM)

Synchrotron X-ray Diffraction – an emphasis on powder diffraction by Andy Fitch (ESRF) (10:00 AM - 10:30 AM)

Synchrotron X-ray imaging and computed tomography by Paul Tafforeau (ESRF) (10:30 AM - 11:00 AM)

Break (11:00 AM - 11:15 AM)

Introduction to Femtosecond X-ray Experiments at X-ray Free Electron Lasers by Christian Bressler (EuXFEL, Universität Hamburg) (11:15 AM - 12:15 PM)

Infrared FELs, their applications and science examples by Stefan Winnerl (Helmholtz Zentrum Dresden Rossendorf) (12:15 PM - 12:45 PM)

Experiments at large scale facilities and FAIR and open data, practice and workflows in X-ray science by Hans-Georg Steinrück (Forschungszentrum Jülich GmbH) (12:45 PM - 1:15 PM)

Session 4: chair by tbd (2:30 PM - 2:31 PM)

Accessing beamtime at large scale facilities for new and non-expert users through NEPHEWS via User-Twinning and ESR support programme by Antje Vollmer (HZB) & Philip King (UKRI/ISIS), (2:31 PM - 3:00 PM)

Accessing beamtime at large scale facilities through NEPHEWS – access modes and proposal writing by Giovanna Cicognani (ILL) & Rainer Lechner (Montanuniversitaet Leoben) (3:00 PM - 4:00 PM)

A case study in neutron science of user access at large scale facilities from non-facility countries by Paavo Penttilä (Uni Aalto – FI) (4:00 PM - 4:30 PM)

Using XRF mapping and micro-XAFS to explore the spatial distribution and stability of nanoparticles injected in tissues by Maria Katsikini (Aristotle University of Thessaloniki) (4:00 PM - 4:30 PM)