



## Agenda of virtual trainings

### Basic information

Project acronym	NEPHEWS
Project full title	NEutrons and PHotons Elevating Worldwide Science
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## **Introduction**

The virtual training is designed and tailored for new and inexperienced users of large scale facilities to understand the Research Infrastructure landscape, specifically the use of the range of experimental techniques and how to access them, in particular under the NEPHEWS project. These training activities aim to decrease access barriers to RIs for new and non-experienced users as well as ESRs and to create opportunities of doing internships and participate in User-twinning programme.

The training programme is thought out to cover two-day online training providing approx. 12 hours ( $\approx 6$  hours per day) of guidance and advice on research capabilities of SR/FEL and N RIs and their complementarity, open access procedures to the large-scale RI as well as on criteria for the development of a successful beamtime proposal to RIs. Time for discussion is allocated to the scheduled sessions.

The speakers will be experienced representatives of research infrastructures affiliated with the NEPHEWS project under the umbrella of LENS and LEAPS and neutron and photon infrastructure user organizations ENSA and ESUO.

## The agenda of two days virtual training

<p style="text-align: center;"><b>FIRST DAY</b> (approximately time of training - 6 hours)</p>		
Approx. time (in minutes)	Scientific scope of interest / Speaker	Topic
<p><b>Morning session</b> <i>Topics related to Research infrastructure landscape and Measurement Techniques</i></p>		
30	Introduction to the X-ray landscape in Europe. <b>Speaker:</b> specialist from ESUO	Introduction to European X-ray facilities, covering their past and future evolution, complementarity (similarities and differences) and position in the worldwide landscape.
30	Introduction to the neutron landscape in Europe. <b>Speaker:</b> specialist from ENSA	Introduction to European neutron facilities, covering their past and future evolution, complementarity (similarities and differences) and position in the worldwide landscape.
90	X-rays and their interaction with matter. <b>Speaker:</b> specialist from ESRF	Introduction to X-rays as a probe of matter, materials and processes.
<p><b>Afternoon session</b> <i>Topics related to Measurement Techniques</i></p>		
90	Neutrons and their interaction with matter. <b>Speaker:</b> specialist from ILL and/ or ELI	Introduction to neutrons as a probe of matter, materials and processes.
120	Experimental techniques and science example: neutrons. <b>Speaker:</b> specialist from N facility	Introduction to a range of techniques, covering at least the most widely used, with recent examples that illustrate typical applications and the <i>state-of-the-art</i> .

**SECOND DAY**  
(approximately time of training - 6 hours)

Approx. time (in minutes)	Scientific scope of interest / Speaker	Topic
<b>Morning session</b> <i>Topics related to Experimental techniques</i>		
120	Experimental techniques and science example: synchrotron X-rays. <b>Speaker:</b> specialist from SR facility	Introduction to a range of techniques, covering at least the most widely used, with recent examples that illustrate typical applications and the <i>state-of-the-art</i> .
120	Experimental techniques and science example: synchrotron X-rays. <b>Speaker:</b> specialist from EU-XFEL	Introduction to a range of techniques, covering at least the most widely used, with recent examples that illustrate typical applications and the <i>state-of-the-art</i> .
<b>Afternoon session</b> <i>Topics related to Accessing beam time</i>		
30	Accessing beamtime at large scale facilities through NEPHEWS via twinning. <b>Speaker:</b> specialist from SOLARIS	Twinning new and non-expert users with expert users.
60	Accessing beamtime at large scale facilities through NEPHEWS – access modes and proposal writing. <b>Speaker:</b> specialist from ILL and ESRF	Access modes at facilities and writing high quality proposals for beamtime in parallel at neutron and photon facilities.
30	Case studies of user access at large scale facilities from non-facility countries. <b>Speaker:</b> from ENSA/ESUO	User experience of accessing beamtime.