The Training Portal for Photon and Neutron Data Services

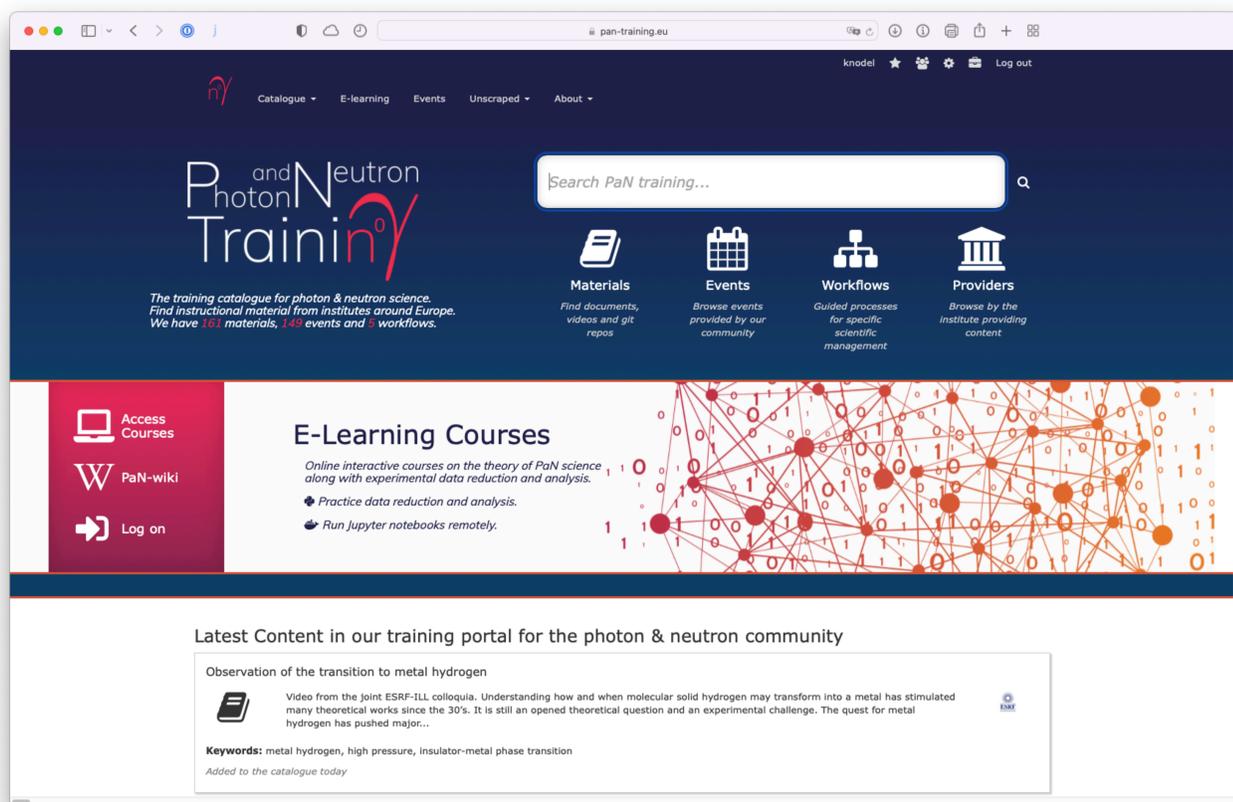**Photon and Neutron Training**

Catalogue Team:
Helmholtz-Zentrum Dresden-Rossendorf (HZDR), Synchrotron SOLEIL, European Grid Infrastructure Foundation (EGI)

E-learning Team:
European Spallation Source (ESS), Extreme Light Infrastructure (ELI), Central European Research Infrastructure Consortium (CERIC-ERIC), European XFEL, European Synchrotron Radiation Facility (ESRF), Institut Laue-Langevin (ILL), Paul Scherrer Institute (PSI)

The Catalogue: pan-training.eu

Education is becoming an increasingly important topic to help scientists work on photon and neutron sources. Other relevant areas such as advanced quantum technologies will also play a key role in the future.
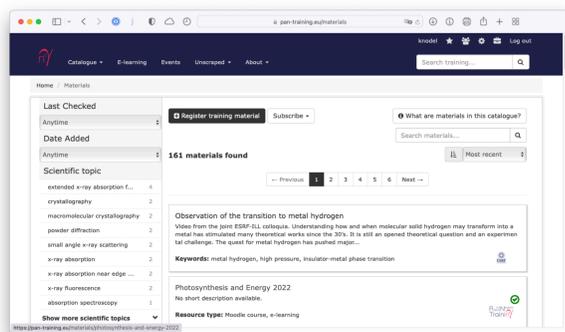
One of the goals of ExPaNDS (European Open Science Cloud (EOSC) Photon and Neutron Data Service) is to train research scientists in order to better understand the issues, methods and available computational RI infrastructures to address critical research questions.

Our PaN-training catalogue provides a one-stop shop for trainers and trainees to discover online information and content:

- For trainers the catalogue offers an environment for sharing materials and event information.
- For trainees, it offers a convenient gateway via which to identify relevant training events and resources, and to perform specific, guided analysis tasks via training workflows to provide FAIR research.
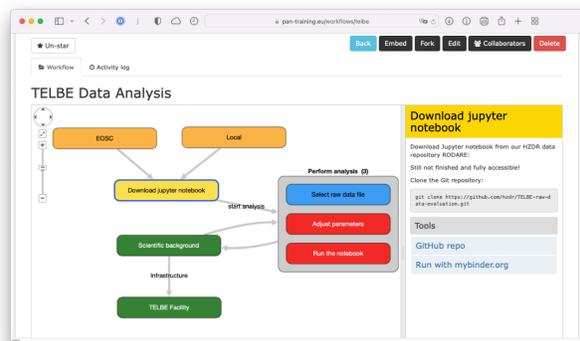
Training Material and Events

Materials in our training catalogue can be accessed at any time. These may be in a variety of different formats, including online tutorials, videos, presentations, and so on.

A significant portion of the content is harvested from our e-learning platform developed in the PaNOSC project, but also from third-party sources like LEAPS and LENS.

Training Workflows

An essential feature in our training catalogue are graphical training tools or *Training Workflows*. The main types of workflow are: Educational Resources, Learning Pathways and Experiment Maps. These encapsulate different types of, and/or approaches to, training, at different levels of granularity.
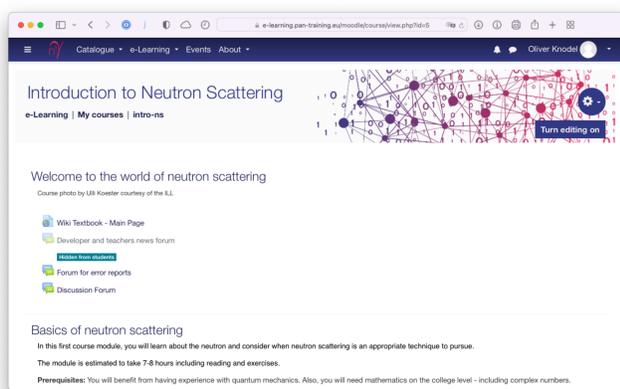

Integrated E-Learning Platform

Our associated e-learning platform hosts free education and training for scientists and students with an integration of Jupyter notebooks.
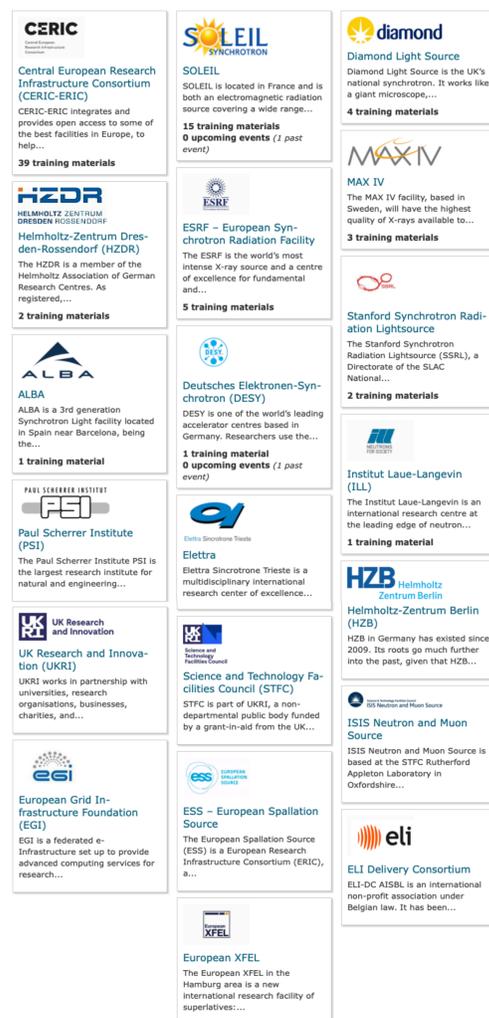
Photon and Neutron eLearning

The e-learning platform was developed in the PaNOSC (Photon and Neutron Open Science Cloud) project and is available at: e-learning.pan-training.eu
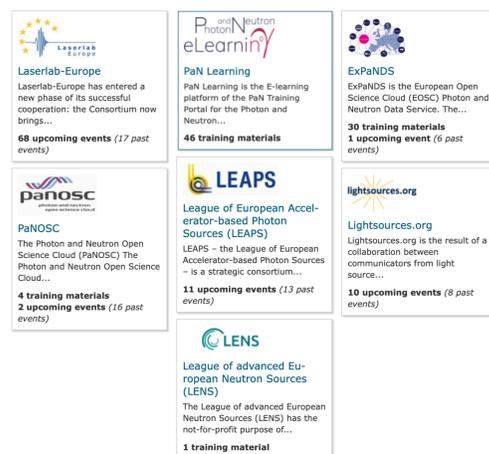

Content Providers

Content providers are entities (such as academic or research institutions, non-profit organisations, portals etc.) that provide training materials of relevance to the PaN community.

Organisations

CERIC - Central European Research Infrastructure Consortium (CERIC-ERIC)
CERIC-ERIC integrates and provides open access to some of the best facilities in Europe, to help...
39 training materials

SOLEIL SYNCHROTRON
SOLEIL is located in France and is both an electromagnetic radiation source covering a wide range...
15 training materials
0 upcoming events (1 past event)

diamond - Diamond Light Source
Diamond Light Source is the UK's national synchrotron. It works like a giant microscope,...
4 training materials

HELMHOLTZ ZENTRUM DRESDEN ROSSENDORF - Helmholtz-Zentrum Dresden-Rossendorf (HZDR)
The HZDR is a member of the Helmholtz Association of German Research Centres. As registered,...
2 training materials

ESRF – European Synchrotron Radiation Facility
The ESRF is the world's most intense X-ray source and a centre of excellence for fundamental and...
5 training materials

MAX IV
The MAX IV facility, based in Sweden, will have the highest quality of X-rays available to...
3 training materials

ALBA
ALBA is a 3rd generation Synchrotron Light facility located in Spain near Barcelona, being the...
1 training material

Deutsches Elektronen-Synchrotron (DESY)
DESY is one of the world's leading accelerator centres based in Germany. Researchers use the...
1 training material
0 upcoming events (1 past event)

Stanford Synchrotron Radiation Lightsource
The Stanford Synchrotron Radiation Lightsource (SSRL), a Directorate of the SLAC National...
2 training materials

PAUL SCHERRER INSTITUT - Paul Scherrer Institute (PSI)
The Paul Scherrer Institute PSI is the largest research institute for natural and engineering...

Elettra
Elettra Sincrotrone Trieste is a multidisciplinary international research center of excellence...

Institut Laue-Langevin (ILL)
The Institut Laue-Langevin is an international research centre at the leading edge of neutron...
1 training material

UK Research and Innovation (UKRI)
UKRI works in partnership with universities, research organisations, businesses, charities, and...

Science and Technology Facilities Council (STFC)
STFC is part of UKRI, a non-departmental public body funded by a grant-in-aid from the UK...

HZB Helmholtz-Zentrum Berlin (HZB)
HZB in Germany has existed since 2009. Its roots go much further into the past, given that HZB...

EGI - European Grid Infrastructure Foundation (EGI)
EGI is a federated e-Infrastructure set up to provide advanced computing services for research...

ESS – European Spallation Source
The European Spallation Source (ESS) is a European Research Infrastructure Consortium (ERIC), a...

ISIS Neutron and Muon Source
ISIS Neutron and Muon Source is based at the STFC Rutherford Appleton Laboratory in Oxfordshire...

eli - ELI Delivery Consortium
ELI-DC AISBL is an international non-profit association under Belgian law. It has been...

XFEL - European XFEL
The European XFEL in the Hamburg area is a new international research facility of superlatives:...

Projects and Portals

Laserlab-Europe
Laserlab-Europe has entered a new phase of its successful cooperation: the Consortium now brings...
68 upcoming events (17 past events)

PaN Learning
PaN Learning is the E-learning platform of the PaN Training portal for the Photon and Neutron...
46 training materials

ExPaNDS
ExPaNDS is the European Open Science Cloud (EOSC) Photon and Neutron Data Service. The...
30 training materials
1 upcoming event (6 past events)

PaNOSC
The Photon and Neutron Open Science Cloud (PaNOSC) The Photon and Neutron Open Science Cloud...
4 training materials
2 upcoming events (16 past events)

LEAPS - League of European Accelerator-based Photon Sources (LEAPS)
LEAPS – the League of European Accelerator-based Photon Sources – is a strategic consortium...
11 upcoming events (13 past events)

lightsources.org
Lightsources.org is the result of a collaboration between communicators from light source...
10 upcoming events (8 past events)

LENS - League of advanced European Neutron Sources (LENS)
The League of advanced European Neutron Sources (LENS) has the not-for-profit purpose of...
1 training material

Acknowledgements

The catalogue team would like to acknowledge the provision of the initial TeSS code from ELIXIR, and thank them for such a beautiful project.

elixir TeSS

ExPaNDS **panosc**