

# Poster Abstract for LU Open Science Days 2024

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Accelerating Teaching: Using the stories from accelerator-driven Large-Scale Research Infrastructures to inspire high school teachers, through a Massive Open Online Course for European educator professional development

In 2022-2024 European Spallation Source (ESS) and Lund University were part of a collaboration that put together a Massive Open Online Course, or MOOC, for European high school science teachers. With EU ERASMUS+ funding, the MOOC aimed to “Inspire teachers to use the stories from large facilities across Europe to teach the topics they all teach, such as: **Forces, Magnetism, the structure of an atom, light, electromagnetism and more.**”

The consortium consisted of three Research Infrastructures (ESS, MAX IV and CERN), together with the science teacher training departments from the universities in Lund, Malmö and Copenhagen, as well as two science centres - Lund University’s Vattenhallen and Experimentarium in Denmark. European Schoolnet – a Brussels-based institution who produce MOOCs aimed at teachers, contributed by hosting the MOOC on their science teacher network, Scientix.

The MOOC objectives were for participants to:

- Understand the value of large facilities like CERN in providing a context for STEM teaching
- Learn how to engage students in modern science research through free digital tools
- Gain a well-rounded understanding of how particle accelerators work, are used in society and how they contribute to modern research in all STEM subjects
- Identify and build on educational methodologies that stimulate students’ analytical and critical thinking skills, collaboration, communication, and active participation competencies.

The course ran for two months and reached **1300 teachers from 23 different countries**. After the time-specific element was over (which included weekly live webinars), it continues in legacy format on the Scientix website with all the materials still available to access or download.

This poster will show the aims and outcomes of the project, visualise some of the Learning Scenarios (extended cross-curricular lesson plans) that were developed, and highlight future plans, as the project draws to a close in November 2024.

[https://bit.ly/AT\\_MOOC23](https://bit.ly/AT_MOOC23)

<https://www.scientix.eu/accelerating-teaching-mooc>