

Workshop Invitation

"EBRAINS Tools for Teaching": Using Digital Neuroscience Tools in the Classroom

How can modern digital tools be used to vividly explain the brain in the classroom? What open resources are available to interactively teach neuroscience concepts? In a **two-hour workshop** on **12 March 2025 at Heidelberg University**, we will showcase how the EBRAINS research infrastructure can support teaching and provide space for discussion and exchange.

ABOUT EBRAINS

[EBRAINS](#) is a European digital research infrastructure that supports scientists across Europe in better understanding the brain. It offers free access to an extensive collection of neuroscience data, digital brain models, and high-performance computing systems. Researchers use these resources to gain new insights into the brain.

However, these tools are also highly valuable for education: They allow complex neuroscience topics to be conveyed in a clear and interactive way. For example, the [EBRAINS Human Brain Atlas](#) enables users to explore the human brain in 3D—similar to how Google Earth visualises our planet—allowing for a detailed examination of its structures. Another example is the [Brain-ScaleS](#) neuromorphic computing system, developed in Heidelberg, which enables the hardware-based simulation of brain functions and the emulation of complex neural networks. Many of these tools can be easily accessed online via a web browser, without requiring any prior local software installation.

ABOUT THE WORKSHOP

This workshop is designed for university educators and secondary school teachers in scientific subjects. We will demonstrate how EBRAINS tools can be used in the classroom to make neuroscience concepts more understandable. Experts will present practical examples of how these digital tools can be integrated into teaching. Following this, we will discuss the opportunities, challenges, and requirements for using open science tools in science education.

The workshop offers a great opportunity to connect with researchers and developers of open science tools in a relaxed atmosphere and to explore new digital tools for your teaching.

FURTHER INFORMATION & REGISTRATION

The workshop will take place on **12 March 2025 from 16:30 to 18:30** as part of the event: "Accelerate Your Neuroscience Research with EBRAINS: EBRAINS Tutorials and Users Day".

Location: Heidelberg University, Kirchhoff Institute for Physics, Building EINC, Im Neuenheimer Feld 225a, D-69120 Heidelberg

More information and full workshop registration: <https://einc.eu/events/EBRAINS2025UsersDay>

If you **only wish to attend the "EBRAINS Tools for Teaching" session** (16:30 – 18:30) and cannot stay for the dinner, participation is **free of charge**. The introduction talks of the workshop can also be attended **online via Zoom**. For these options, please register separately here: <https://einc.eu/events/EBRAINS2025UsersDay/ToolsForTeaching>

For general event inquiries, please contact: bjoern.kindler@kip.uni-heidelberg.de
For workshop-related questions, please contact: education@ebrains.eu