



## Extreme Light Infrastructure Summer School

## **2-6 September 2024** ELI ALPS Facility, Szeged, Hungary



The 9th edition of the <u>ELI Summer School (ELISS)</u> series aims to provide young scientists with a comprehensive overview of the generation and application of intense laser pulses and laser-driven particle and radiation sources. Participants will also have the opportunity to engage in dynamic poster sessions and visit the ELI ALPS laboratories while making new connections with other students, speakers, and the ELI staff.

## Key topics of ELISS 2024

- High-power ultrafast lasers
- Generation of bright coherent and incoherent X-ray pulses using short pulse lasers
- Free electron lasers from IR to x-rays
- Ultrafast imaging techniques with short x-ray pulses
- Function and applications of short x-ray pulses (including synchronizations)
- Particle acceleration by lasers and applications: proton therapy
- Physics of dense plasmas and warm dense matter, laboratory astrophysics
- Ultra-intense laser matter interaction
- Nuclear physics with high-intensity lasers
- Femtoscience: applications in biology, chemistry and solid-state physics
- Generation of attosecond pulses: attoscience photonics

For questions or comments, please contact the Organising Committee.

