

2nd ELI Summer School (**ELISS 2017**)

Romania, August 27th-September 1st, 2017

FIRST ANNOUNCEMENT - SAVE THE DATE

After a very successful 1st edition in Dolní Břežany (Czech Republic) in 2016, we are pleased to announce the 2nd edition of the ELI Summer School (ELISS 2017), which will be hosted by ELI–Nuclear Physics and held in the period **27 August – 1 September 2017** in the Carpathian Mountains in Romania.

SCOPE AND TOPICS

The aim of the ELI Summer School (**ELISS**) is to offer Ph.D. students, post-docs and young researchers an introductory training in the main topics of the extreme light research and applications undertaken at the three pillars of ELI (<u>ELI-ALPS</u>, <u>ELI-Beams</u> and <u>ELI-NP</u>), from ultrahigh power laser research and laser-based plasma physics, to particle acceleration, study of fundamental radiation-matter interactions, nuclear photonics and attoscience. The lectures will be delivered by highly-recognized specialists in the field, starting from a basic level while also highlighting the latest experimental and theoretical advances and most recent applications. Junior participants registered at the school are strongly encouraged to share their own research interests with the other participants by presenting a poster in a dedicated poster session.

The school scientific program will cover the following topics (not comprehensive):

- Astrophysics and cosmology with high-power lasers
- Attoscience
- Fundamental nuclear science and spectroscopy
- Generation of attosecond pulses
- Generation of bright coherent and incoherent x-ray pulses using short pulse lasers
- High-power laser based particle acceleration and applications
- High-peak and -average power ultrafast lasers
- Laser-driven nuclear physics
- Materials under extreme conditions
- Novel medical imaging and therapeutic applications
- Nuclear materials imaging, transmutation and management
- Photo-production of rare isotopes
- · Physics of dense plasmas and warm dense matter, laboratory astrophysics
- Strong-field QED and dark-matter physics with high-power lasers
- Tabletop Free Electron Lasers (FEL) based on laser wakefield plasma accelerators

- Ultrafast imaging techniques with short x-ray pulses
- Ultrafast science: applications in biology, chemistry and solid-state physics

EUCALL YOUNG RESEARCHERS BURSARIES:

The European Cluster of Advanced Laser Light Sources (<u>EUCALL</u>) provides Bursaries for up to 20 Young Researchers to attend the Summer School. Selected candidates can receive up to 500€ to covering registration package and travel costs.

SCIENTIFIC COMMITTEE:

Dimiter Balabanski – ELI-NP
Dimitris Charalambidis – ELI-ALPS
Georg Korn – ELI-Beamlines
Catalin Miron – ELI-DC
Florin Negoita – ELI-NP
Dan Stutman – ELI-NP (Co-chair)
Kazuo A. Tanaka – ELI-NP (Chair)
Ovidiu Tesileanu – ELI-NP
Calin Ur – ELI-NP
Daniel Ursescu – ELI-NP

ORGANIZING COMMITTEE:

Gabriela Apetrei – ELI-NP
Catalin Miron – ELI-DC
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Gina Pana – ELI-NP
Mariann Réda – ELI-DC
Laurentiu Serban – ELI-NP
Dan Stutman – ELI-NP
Gabriel Suliman – ELI-NP
Michael Vích – ELI-Beamlines

SECRETARIAT: Ms. Gabriela Apetrei & Ms. Catalina Oprea

SCHOOL WEBSITE: http://www.eli-np.ro/eliss2017

CONTACT: Please address all correspondence by email to the secretariat of the school eliss2017@eli-np.ro