The 5th ELI User Call Opens on 25 September

The Extreme Light Infrastructure (ELI) is set to launch the **5th ELI User Call on 25 September** with submissions open until **29 October**. The Call will continue to support a wide range of experiments, leveraging the cutting-edge equipment at **ELI ALPS**, **ELI Beamlines,** and **ELI NP**. Researchers and scientists worldwide are invited to submit their proposals which will be evaluated based on scientific excellence by an international peer-review panel.

A preliminary list of the available equipment for this Call is published with this announcement. The complete set of parameters and technical details are being revised, considering ongoing commissioning activities, and will be accessible on the User Portal by 25 September.

Submit Your Proposal and Secure Beamtime
It is highly recommended that applicants consult with beamline scientists prior to submitting their final proposals to obtain all the necessary information for their research plans. Contact details for each instrument are listed on the User Portal.

New User System
With this Call a new integrated User System will be introduce, enabling applicants to manage their proposal lifecycle, access information, and receive training through a streamlined and user-friendly platform. It is recommended that applicants set up their account and familiarise themselves with the system ahead of submitting their proposal.

The ELI User Office manages user access across the ELI ERIC Facilities, providing researchers with a single point of contact for all proposals, inquiries, and support. The goal is to deliver a consistent user experience and facilitate groundbreaking research. For any questions or further information, please reach out to the User Office at user-office@eli-laser.eu.

Stay up to date by visiting the ELI User Portal or sign up for the mailing list to receive regular news about the ELI User Calls and key information about ELI.

Instrument offer/ Available equipment for CALL 5
Launch: 25th September 2024
Deadline: 29th October 2024
Experiment period: Spring-Autumn 2025

ELI User Call 5 - Preliminary list of Available Equipment

Primary Source (on-target parameters)	Equipment available for experimenting	Short description
L1 (1 kHz, 15 fs, 3 TW)	HHG	High Harmonic Generation XUV beamline
	HHG-MAC	Multipurpose station for AMO science and Coherent diffractive imaging served by HHG beamline

	PXS -TREX	Endstation for time-resolved X-ray diffraction and imaging experiments served by PXS Plasma X-ray Source beamline
Legend	HHG-MAC	High Harmonic Generation source of 10-120 keV photons
	PXS -TREX	Multipurpose station for AMO science and Coherent Diffractive Imaging served by HHG source
L3 (3.3 Hz, 27 fs, 0.4 PW)	Gammatron	Betatron/Compton Gamma-ray beamline
	ELBA	Electron Beamline for fundamental science and Applications
L4n (1 shot / 2min, 1 kJ, 2-10ns)	P3	Plasma Physics Platform for high energy density physics and fusion research
Astrella	trELIps	Endstation for time-resolved Spectroscopic Ellipsometry
	TCT	Endstation for Transient Current Technique
Femtopower/Solstice	FSRS	Femtosecond Stimulated Raman Spectroscopy
	TA	Ultrafast Transient Absorption spectroscopy
SYLOS 2 (1kHz, 8fs, 3.75 TW)	SYLOS2	Experimental platform for the SYLOS 2 laser
	GPRC	Gas phase reaction control pump-probe setup for femtochemistry
	SYLOS COMPACT	High Harmonic Generation source @ 1 kHz with XUV - IR pump-probe setup
	SYLOS LONG	High Harmonic Generation source @ 1 kHz with XUV - IR pump-probe setup
SYLOS 3 (1kHz, 9 fs, 13 TW)	SYLOS3	Experimental platform for the SYLOS 3 laser
	SYLOS SHHG	High Repetition Rate Surface Plasma Interaction Platform
	SYLOS Electron	Laser-plasma acceleration platform, delivering relativistic electrons up to 1 kHz
	LEIA	Low-energy ion acceleration and neutron generation beamline driven at 1 kHz
SYLOS ALIGNMENT (10Hz, 12fs, 40mJ)	SYLOS COMPACT	High Harmonic Generation source @ 10 Hz with XUV-XUV and XUV - IR pump-probe setup
	SYLOS LONG	High Harmonic Generation source @ 10 Hz with XUV - IR pump-probe setup
	SYLOS SHHG	High Repetition Rate Surface Plasma Interaction Platform

	SYLOS Electron	Laser-plasma acceleration platform, delivering relativistic electrons up to 10 Hz
	LEIA	Low-energy ion acceleration and neutron generation beamline driven at 10 Hz
	LIDT	Laser-induced damage threshold test station
MIR (100kHz, 40fs, 40mJ)	MIR	Experimental platform for the MIR laser
	HHG in Solids	Generation and study of HHG in solids on MIR
HR1 (100kHz, 8fs, 1mJ)	HR1	Experimental platform for the HR1 laser
	TAS	Transient absorption spectroscopy for liquids and films
	MDOS	Multi-dimensional optical spectroscopy for biological samples
	HR Condensed	High Harmonic Generation source @ 100 kHz with XUV - IR pump-probe setup on condensed-phase targets
	HR Condensed - Nanoesca	NanoESCA/photo-emission electron microscope (PEEM) with spatial, momentum and spin resolution applicable for static and pump-probe measurements
	HR Gas	High Harmonic Generation source @ 100 kHz with XUV - IR pump-probe setup on gas-phase targets
	HR Gas- REMI	HHG source with a reaction microscope (COLTRIMS) endstation
HR Alignment (10 kHz, 7 fs, 1 mJ)	HR AL	Experimental platform for the HR Alignment laser
	HR Gas- REMI	HHG source with a reaction microscope (COLTRIMS) endstation
	HR Gas	High Harmonic Generation source @ 10 kHz with XUV - IR pump-probe setup
THz Pump (1:50Hz, 500fs, 500mJ; 2: 1kHz, 92 fs, 4mJ)	THz Pump	Experimental platform for the THz Pump Laser
	THz High Energy	High-energy THz source (~mJ) for intense THz experiments @ 50 Hz
NLTSF Pump (no external output)	NLTSF	Non-linear THz spectroscopy for THz pump-probe measurements with visible probe beams
Venteon/ helium VUV	NanoESCA	Photo-emission electron microscope with spatial, momentum and spin resolution
Element2	UF Ellipsometer	Ultrafast ellipsometer with fs resolution
CW1550, CW632, CW533	SNOM	Scanning near-field optical microscope with fs irradiation

n/a	Radiobiology with IFIR	Biology facilities including cell culture, histopathology, zebrafish labs with dosimetry and Irradiation endstation for multidisciplinary research
n/a	Nanofabrication	Electron microscopy, electron lithography and focused ion beam lithography facilities
HPLS (1 PW, 24 fs, 1 Hz; 10 PW, 23 fs, 1/60 Hz)	E5 - 1 PW short or long focal	Plasma Physics Platform for high energy density physics and Application
	E6 - 10 PW long focal	Laser-driven electron beam for fundamental science and Applications