ELI ERIC Fair of PhD and MSc topics

Date, Location	**27 March 2025, Wroclaw**
Dial in details / hybrid events	**Hybrid meeting**

Agenda

Thursday, 27 March; the event will be moderated by CANDELA		
Time	**Topic**	
9:00 – 9:10	Welcome by Prof. Krzysztof Abramski	Krzysztof Abramski (KA)
9:00 – 9:30	ELI ERIC overview	Naďa Witzanyová (NW) Zsolt Fülöp (ZF)
9:30 – 9:50	ELI ALPS (ALPS) facility and areas where PhD and MSc topics are available	Zsolt Divéki
9:50 – 10:10	ELI Beamlines (Beams) facility and areas where PhD and MSc topics are available	Carlo Maria Lazzarini
10:10 – 14:00 **Flash talks by expert supervisors on topics 10 minutes per speaker**		
MSc - Development of the differential pumping system for long targets.		Michal Nevrkla, Beams
PhD - Investigation of SRS and SBS Instability Suppression Effects in Magnetized and Non-Magnetized L4n Laser Plasma using the Full Aperture Backscattering Diagnostics. PhD - Development of an all-optical platform for the generation of kT-scale magnetic fields for P3.		Kobi Hall, Beams
PhD - Development of a laser-driven platform for the generation of strong pulses of GHz waves.		Michael Ehret, Beams
MSc - Characteristics of laser-driven polarization pulses via the development of a synthetic polarimetry diagnostic using Fortran and Python		Tomáš Laštovička, Beams
MSc - Characterization of laser-driven ion beams via the development of a (semi-) automatic analysis routine for ion spectra using Python. MSc - Characterization of plasma parameters via the development of a (semi-) automatic analysis routine for SOP and VISAR using Python.		Singh Raj Laxmi, Beams

11:00 – 11:20 Coffee break	
MSc - Characterization of particle detectors by laser-induced transient current technique.	Mateusz Rebarz, Beams
PhD - Development of QED cascade in radiating optical trap – two different topics.	Sergei Bulanov, Beams
PhD - Study of laser-driven beam dynamics in the ELIMED beam transport line.	Francesco Schillaci, Beams
PhD - Effects of prepulses on laser-driven ion acceleration. PhD - Nuclear Reactions Induced by High-Power Laser Pulses Interacting with a Target.	Jan Psikal and Lorenzo Giuffrida, Beams
PhD - Towards establishing X-ray spectroscopy as a tool to detect ionizing radiation-induced damage in DNA. MSc - Automation of X-ray spectroscopy end station and integration of sample handling into the existing infrastructure.	Anna Zymaková, Beams
PhD - Study of the LWFA electron radiation-induced processes in a medium relevant to structural dynamic research.	Illia Zymak, Beams
Two MSc topics - Carlo Maria will talk about them in his opening physical speech.	Carlo Maria Lazzarini
PhD - THz emission and control of light-harvesting proteins.	József Fülöp, ALPS; Zimányi László HUN-REN Biological Research Centre
PhD - Measuring the tunnel exit momentum in strong-field ionization.	Attila Czirják, ALPS
PhD - Investigation of the band structure of 2D materials by condensed matter end station.	Kónya Zoltán, Óvári László, ALPS
PhD - High-order harmonic generation with quantified fields.	Péter Földi, ALPS
Two PhD positions – Zsolt will talk about them in his opening physical speech.	Zsolt Divéki, ALPS
PhD - Machine Learning-Driven Optimization of Lead-Free Perovskite-Inspired Materials for Indoor Photovoltaic Applications PhD - Nonequilibrium Order Parameter Dynamics in Quantum Materials. PhD - Photoelectron Interference in Strong-Field Ionization of Rare Gas Mixtures: Probing Coherent Wave Packet Dynamic. PhD - Beyond-Dipole Corrections in Attosecond Time-Resolved Photoionization.	Mousumi Upadhyay Kahaly, ALPS
14:00 Closing and next steps	NW, KA, ZF