



SCIENTIFIC PROGRAM

14/9/2026	15/9/2026	16/9/2026	17/9/2026	18/9/2026
9:00 Welcome	9:00 Pomerantz	9:00 Michel	9:00 Cipiccia	9:00 Rus
9:10 Olson	9:30 Tomassini	9:30 Oliva	9:30 Skruszewicz	9:30 Chen
9:40 Murakami	10:00 Valenta	10:00 Lehmann	10:00 Vyšín	9:55 Giuffrida
10:10 Hao	10:20 Casati	10:20 La Porte	10:20 Shirozhan	10:15 Kojima
10:30 Coffee break	10:40 Coffee break	10:40 Coffee break	10:40 Coffee break	10:35 Coffee break
11:00 Cotelto	11:10 Lundh	11:10 Maffini	11:10 Dromey	11:05 Jelínek
11:30 Huo	11:40 Lécz	11:40 de Almeida	11:40 Mašlářová	11:25 Krása
12:00 Condamine	12:00 Touguet	12:00 Velarde	12:10 Zsíros	11:45 Cikhardt
12:20 Földes	12:20 Masckala	12:20 Kondrashev	12:30 Vábek	12:05 Jurkovičová
12:40 Blackman	12:40 Swain	12:40 lunch	12:50 lunch	12:25 Grau
13:00 lunch	13:00 lunch	13:40 Grech	13:50 Poster session	12:45 Closing
14:00 Menoni	14:00 Arjmand	14:10 Corde		13:15 ELI visit bus
14:30 Brambrink	14:30 Chaulagain	14:40 Mercuri-Baron		
15:00 Hoffmann	14:50 Varma	15:00 Custodio		
15:20 Kraus	15:10 Mendonca	15:20 Galbiati		
15:40 Ialovega	15:30 Chodukowski	15:40 Coffee break		
16:00 Coffee break	16:00 Coffee break	16:10 Silva	16:00 Coffee break	
16:30 Batani	16:30 Tazes	16:40 Schumacher	16:30 Li	
17:00 Dulat	17:00 Schramm	17:10 Cornet	17:00 Lamač	
17:20 Cipriani	17:30 Iaccarino	17:30 Rips	17:20 Nevrla	
17:40 Consoli	17:50 Malka		17:40 Hadjisolomou	

Monday 14 September – LASER-DRIVEN FUSION

Chair: Florian Condamine	9:10 INVITED	Rick Olson (Los Alamos National Laboratory) <i>Physics of direct-drive wetted foam ICF capsules</i>
	9:40 INVITED	Masakatsu Murakami (Institute of Laser Engineering, Osaka University) <i>Self-Similar Multi-Shock Implosions for Ultra-High Compression of Matter</i>
	10:10	Liang Hao (Institute of Applied Physics and Computational Mathematics, Beijing) <i>Study of asymmetric backscattering in hohlraums due to cross-beam energy transfer</i>
Chair: Piotr Rączka	11:00 INVITED	Manuel Cotelo Ferreira (Universidad Politécnica de Madrid) <i>Inertial Fusion Hybrid Targets for Advanced Lasers</i>
	11:30 INVITED	Wenyi Huo (Institute of Applied Physics and Computational Mathematics, Beijing) <i>Nonlocal electron heat transport involving Langdon effect in laser plasmas</i>
	12:00	Florian Condamine (GenF) <i>Effect of residual gas pressure on ablation plasma properties in ns-kJ laser–solid interactions</i>
	12:20	Istvan Földes (HUN-REN Wigner Research Centre) <i>Excimer lasers with detuned oscillators: a possible alternative for inertial fusion energy drivers</i>
	12:40	David Blackman (ELI Beamlines Facility, The Extreme Light Infrastructure ERIC) <i>Rare temporal spikes and chromatic shear in broadband laser-plasma interactions</i>
Chair: David Blackman	14:00 INVITED	Carmen Menoni (Colorado State University) <i>The US-IFE RISE hub research efforts to advance inertial fusion</i>
	14:30 INVITED	Erik Brambrink (European XFEL) <i>HAFEN: a fusion instrument at European XFEL</i>
	15:00	Dieter H.H. Hoffmann (Xian Jiaotong University) <i>The Fusion Portfolio: Why p-11B Deserves a Place at the Table</i>
	15:20	Dominik Kraus (University of Rostock) <i>The High Energy Density Initiative (HEDI) in Rostock</i>
	15:40	Mykola Ialovega (GenF) <i>Predictive Lifetime Assessment of First-Wall Materials in Direct-Drive Inertial Fusion Energy Systems</i>
Chair: Erik Brambrink	16:30 INVITED	Dimitri Batani (Université de Bordeaux) <i>Contributions from the HiPER+ community to advancing knowledge of IFE physics</i>
	17:00	Ankit Dulat (Helmholtz-Zentrum Dresden-Rossendorf) <i>Multispectral pump-probe studies of nanostructured target dynamics in high-intensity laser-plasma interactions</i>
	17:20	Mattia Cipriani (ENEA) <i>Evolution of the plasma obtained from high-power irradiation of 2PP foams with different morphologies</i>
	17:40	Fabrizio Consoli (ENEA) <i>Charged Beam Manipulation by Laser-Driven Electromagnetic Pulses</i>

Tuesday 15 September

LASER-PLASMA PARTICLE ACCELERATION

Chair: Song Li	9:00 INVITED	Ishay Pomerantz (Tel-Aviv University) <i>Advances in Direct Laser Acceleration: High-Brightness X-ray and Neutron Sources via Plasma Guiding, High-Z Targets, and Flying Focus Pulses</i>
	9:30 INVITED	Paolo Tomassini (ELI Beamlines and ELI NP, The Extreme Light Infrastructure ERIC) <i>Design of high-brightness and multi-GeV LWFA electron beams for tunable sub-fs soft/hard X-FEL and Compton scattering sources</i>
	10:00	Petr Valenta (ELI Beamlines facility, The Extreme Light Infrastructure ERIC) <i>Energy-optimized scaling laws for self-guided laser wakefield accelerators</i>
	10:20	Ginevra Casati (Imperial College London) <i>Vacuum laser acceleration of electrons using a high intensity Ti-Sapphire laser</i>
Chair: Mickael Grech	11:10 INVITED	Olle Lundh (Lund University) <i>Sub-cycle dynamics in few-cycle laser-plasma acceleration</i>
	11:40	Zsolt Léczi (ELI ALPS facility, The Extreme Light Infrastructure ERIC) <i>Asymmetric wave-breaking in nonlinear wakefields driven by intense pulses</i>
	12:00	Jerome Touquet (Laboratoire d'Optique Appliquée) <i>Advanced Beam Shaping for Axi-parabola-Based Laser-Plasma Acceleration</i>
	12:20	Mohamad Masckala (Université Paris-Saclay) <i>High Accuracy Modeling of Laser Driven Electron Acceleration</i>
	12:40	Kalyani Swain (Laboratoire de Physique des 2 Infinis Irène Joliot-Curie) <i>Effect of optical aberrations on the laser wakefield acceleration of electrons using ionisation injection scheme</i>
Chair: Zsolt Lecz	14:00 INVITED	Sahar Arjmand (Istituto Nazionale di Fisica Nucleare) <i>Capillary-Based Laser-Plasma Accelerators: Beam Generation, Characterization, and Optimization</i>
	14:30	Uddhab Chaulagain (ELI Beamlines Facility, The Extreme Light Infrastructure ERIC) <i>Laser-Driven X-ray Sources Based on Plasma Accelerators for Multidisciplinary Applications</i>
	14:50	Chaitanya Varma (Laboratoire d'Optique Appliquée) <i>Semi-Autonomous Optimization of a Laser-Plasma Accelerator for Very High Energy Electron Radiobiology</i>
	15:10	Tito Mendonca (Instituto Superior Tecnico, Universidade de Lisboa) <i>Particle Acceleration by Superluminal and Accelerated Wakefields</i>
	15:30 INVITED	Tomasz Chodukowski (Institute of Plasma Physics and Laser Microfusion) <i>Efficiency of laser energy conversion with Cavity Pressure Acceleration scheme</i>
Chair: Ondřej Klimo	16:30 INVITED	Ioannis Tazes (Hellenic Mediterranean University) <i>High-Repetition-Rate Laser-Driven Ion Acceleration via Optically Shaped Near-Critical Density Gaseous Targets</i>
	17:00 INVITED	Ulrich Schramm (Helmholtz-Zentrum Dresden-Rossendorf) <i>Boosting laser plasma proton acceleration in near critical density targets</i>
	17:30	Matteo Iaccharino (Politecnico di Milano) <i>Advanced carbon-based targets for laser-plasma interaction experiments</i>
	17:50	Gerard Malka (Université de Bordeaux) <i>Significant Increase in the Number of Energetic Protons with Two Hot Temperatures of 1 and 4 MeV During the Interaction of an Ultra-Intense Laser with a Foam Target Near the Critical Density and Coulomb piston signature</i>

Wednesday 16 September

EMERGENT TOPICS IN LASER-MATTER INTERACTION

Chair: Stefan Weber	9:00 INVITED	Pierre Michel (Lawrence Livermore National Laboratory) <i>Gas optics for high-power laser applications</i>
	9:30 INVITED	Eduardo Oliva (Universidad Politécnica de Madrid) <i>3D multiscale modelling of the interaction of structured light with inhomogeneous plasmas: applications to plasma diagnosis</i>
	10:00	Götz Lehmann (Heinrich-Heine University Düsseldorf) <i>Formation and persistence of ponderomotive plasma gratings created by finite-duration laser pulses</i>
	10:20	Jeremy La Porte (Laboratoire pour l'utilisation des lasers intenses) <i>Magnetic field generation by Light Springs through refraction on helical plasma waves</i>
Chair: Fabrizio Consoli	11:10 INVITED	Alessandro Maffini (Politecnico di Milano) <i>Tailoring laser-matter interaction using near-critical nanofoam targets</i>
	11:40	Rafael Russo de Almeida (GoLP/IPFN, Instituto Superior Técnico, Universidade de Lisboa) <i>Generalized Thomson scattering for relativistic plasma optics</i>
	12:00	Pedro Velarde (Instituto de Fusión Nuclear, Universidad Politécnica de Madrid) <i>Collisional ionisation and shake-off processes in XFEL-heated dense plasmas</i>
	12:20	Sergey Kondrashev (Brookhaven National Laboratory) <i>Development of continuous beam laser ion source</i>

STRONG-FIELD QED LASER PHYSICS

Chair: Luís O. Silva	13:40 INVITED	Mickael Grech (LULI, CNRS, Sorbonne Université, École polytechnique, Institut Polytechnique de Paris) <i>Kinetic Theory and Scaling Laws of QED Cascades: From Crossed Fields to Solid Targets</i>
	14:10 INVITED	Sebastian Corde (LOA, CNRS, École polytechnique, ENSTA, Institut Polytechnique de Paris) <i>Progress towards strong-field QED studies at multi-PW laser and accelerator facilities</i>
	14:40	Anthony Mercuri-Baron (University of Plymouth) <i>Quantifying Extreme Laser Intensities Using Nonlinear Photon-Photon Scattering</i>
	15:00	Joao Custodio (ELI Beamlines Facility, Extreme Light Infrastructure ERIC) <i>Coherent radiation and radiation friction in laser-plasma collisions</i>
	15:20	Marta Galbiati (LULI, CNRS, CEA, Sorbonne Université, Ecole Polytechnique, Institut Polytechnique de Paris) <i>Gamma-photon generation with near-critical foam-based targets at the Apollon multi-PW laser</i>

LASER APPLICATIONS IN ASTROPHYSICS RESEARCH

Chair: Dominik Kraus	16:30 INVITED	Luís O. Silva (GoLP/IPFN, Instituto Superior Técnico, Universidade de Lisboa) <i>Shaping and Control of Laser-Driven Extreme Plasma Turbulence</i>
	17:00 INVITED	Samuel Schumacher (University of Rostock) <i>Measurement of the Opacity of Hydrogen at Red Dwarf Star Interior Conditions</i>
	17:30	Louise Cornet (CNRS) <i>Mechanisms at the origin of radio solar bursts by laser-plasma interaction</i>
	17:50	Johannes Rips (University of Rostock, Germany) <i>Investigating the onset of carbon K-shell ionization from imploding CH capsules measured at the National Ignition Facility</i>

Thursday 17 September
LASER-BASED X-RAY SOURCES AND APPLICATIONS

Chair: Brendan Dromey	9:00 INVITED	Silvia Cipiccia (University College London) <i>Dark field x-ray imaging using a laser driven x-ray source</i>
	9:30 INVITED	Sławomir Skruszewicz (University of Hamburg) <i>Imaging and Probing Matter on Extreme Time and Length Scales Enabled by High-Harmonic Generation</i>
	10:00	Luděk Vyšín (Institute of Physics of the Czech Academy of Sciences) <i>Laser-plasma soft X-ray source for radiobiological applications</i>
	10:20	Mojtaba Shirozhan (ELI ALPS, The Extreme Light Infrastructure ERIC) <i>Light-Wave-Controlled Relativistic Electron Mirrors for Isolated Attosecond XUV Pulses</i>
Chair: Jaroslav Nejdl	11:10 INVITED	Brendan Dromey (Queen's University Belfast) <i>Optimising the efficiency of harmonic emission from relativistic laser plasmas</i>
	11:40 INVITED	Dominika Mašlářová (Chalmers University of Technology) <i>Bayesian optimization techniques for multiparameter optimization in attosecond science</i>
	12:10	Szanna Zsíros (ELI ALPS, The Extreme Light Infrastructure ERIC; University of Szeged) <i>Macroscopic peculiarities: wavelength scaling of high-harmonic generation efficiency in noble gases</i>
	12:30	Jan Vábek (FNSPE, Czech Technical University in Prague) <i>Modular multiscale approach to modelling HHG in gases & spectrally selective HHG scheme</i>
Chair: Paolo Tomassini	16:30 INVITED	Song Li (Shanghai Institute of Optics and Fine Mechanics) <i>Research Advances in High-Brightness Betatron Radiation and Its Applications Driven by Ultrafast Intense Lasers at SIOM</i>
	17:00	Marcel Lamač (ELI Beamlines Facility, The Extreme Light Infrastructure ERIC) <i>Beam-driven relativistic mirrors for extreme electromagnetic fields</i>
	17:20	Michal Nevrkla (ELI Beamlines Facility, The Extreme Light Infrastructure ERIC) <i>Fully Reflective High-Repetition-Rate Laser-Plasma Acceleration in Helium</i>
	17:40	Prokopis Hadjisolomou (ELI Beamlines Facility, The Extreme Light Infrastructure ERIC) <i>Self-organised plasma cavities for ultrabright gamma-ray generation with multipetawatt lasers</i>

Friday 18 September
HIGH-INTENSITY LASER FACILITIES

Chair: Sushil Singh	9:00 INVITED	Bedřich Rus (ELI Beamlines Facility, The Extreme Light Infrastructure ERIC) <i>High-repetition PW-class and multi-PW kJ laser systems at ELI Beamlines</i>
	9:30	Xiaowei Chen (Amplitude) <i>Ultrahigh Temporal Contrast OPCPA Front-end for Petawatt Lasers</i>
	9:55	Lorenzo Giuffrida (ELI Beamlines Facility, The Extreme Light Infrastructure ERIC) <i>The ELIMAIA/ELIMED ion beamline at ELI Beamlines: from laser-driven source optimization to user-oriented applications</i>
	10:15	Sadaoki Kojima (Kansai Institute for Photon Science, QST) <i>High-Repetition Laser-Driven Heavy Ion Bunches for the Quantum Scalpel Injector</i>

LASER AND PLASMA DIAGNOSTICS

Chair: Libor Juha	11:05	Šimon Jelínek (Institute of Plasma Physics of the Czech Academy of Sciences) <i>Reaching reproducible relativistic interaction conditions with sub-ps laser pulses at the PALS facility</i>
	11:25	Josef Krása (Institute of Physics of the Czech Academy of Sciences) <i>Characterization of ion emissions from plasmas produced by femto- and nano-second pulses of short-wavelength laser radiation: a brief overview</i>
	11:45	Jakub Cikhardt (Czech Technical University in Prague) <i>Generation of electromagnetic pulses driven by kilojoule laser facility PALS</i>
	12:05	Lucie Jurkovičová (ELI Beamlines Facility, Extreme Light Infrastructure ERIC) <i>THz generation in high-intensity laser plasma as an in-situ probe of ultrafast ionization</i>
	12:25	Benoist Grau (University of Rome "Tor-Vergata" / ENEA) <i>Electro-Optical probing for Electromagnetic pulses emitted in a high-intensity laser facility</i>