Laser-Plasma Accelerators Workshop

Monday, 14 April 2025

Parallel Session: Electron Acceleration (15:00 - 16:40)

time	[id] title	presenter
15:00	[7] Experimental and Simulation Study on Direct Acceleration of Electron Beams Driven by Vortex Lasers	Mr WANG, Wenpeng
15:20	[29] Progress in electron acceleration at CALA	Prof. KARSCH, Stefan
15:40	[30] Laser Wavefront-based Classification of successful Injection in LWFA	ZIRKELBACH, Johannes
16:00	[35] Progress towards high-repetition-rate GeV-scale plasma-modulated plasma accelerators	HOOKER, Simon
16:20	[46] Increasing the energy of high-quality electron bunches from a hybrid L-PWFA	FOERSTER, Moritz

Parallel Session: Ion Acceleration (15:00 - 16:40)

time	[id] title	presenter
	[25] 20-dimension Bayesian Optimization of maximum proton energy in the Target Normal Sheath Acceleration regime using dynamic wavefront shaping on a short focal length off-axis parabola system	CATRIX, Elias
	[40] Ultra-efficient proton acceleration from planar cryogenic hydrogen jets at 1 Hz repetition rate	ASSENBAUM, Stefan
15:40	[44] The contribution of collisional ionization to energetic highly charged Au ions by high-intensity high-contrast laser pulses in a relativistic transparency regime	NISHIUCHI, Mamiko
	[54] Experimental and computational evaluation of Alpha particle production from Laser-driven proton-boron nuclear reaction in hole-boring scheme	HUAULT, Marine
16:20	[64] Diagnosing the onset of relativistically induced transparency in high-energy laser-driven proton acceleration experiments	ZEIL, Karl

Tuesday, 15 April 2025

Parallel Session: Electron Acceleration (15:00 - 16:40)

time	[id] title	presenter
15:00	[11] A parametric approach to plasma wakefield acceleration at CLARA	SABERI, Hossein
15:20	[59] Impact of the gas species and optical ionization effects in kHz laser-wakefield acceleration	MONZAC, Joséphine
15:40	[68] How are CEP effects affected by the injection mechanism in a Laser Wakefield Accelerator driven by near single-cycle laser pulses	FAURE, Jerome
16:00	[101] Injection dynamics in hybrid LWFA-PWFA plasma photocathodes	HEINEMANN, Thomas
16:20	[105] Plasma electron acceleration driven by a long-wave-infrared laser	DOWNER, Michael

Parallel Session: Ion Acceleration (15:00 - 16:40)

time	[id] title	presenter
15:00	[67] New designs of helical coil targets for laser-driven proton, carbon and alpha acceleration	BARDON, Matthieu
15:20	[83] Transforming Laser-Driven Proton Beams into Application-Ready Sources	KROLL, Florian
15:40	[86] Quasi monochromatic Carbon beams acceleration in the peeler setup	TOMASSINI, Paolo
16:00	[104] Cascading Acceleration Regimes in the Relativistically Induced Transparency Regime Driven by Ultra-Intense PW Lasers	ZIEGLER, Tim
16:20	[108] Laser-Driven Proton Sources for Efficient Radiation Testing	Prof. ANTICI, Patrizio

Thursday, 17 April 2025

Parallel Session: Applications (15:00 - 16:40)

time	[id] title	presenter
	[33] Exploring deep in□vivo application of laser-driven very-high, energy, wide spectrum electrons	FLACCO, Alessandro
	[36] Laser-driven Particle Induced X-Ray Emission for Rapid Real-Time Analysis of Aerosols	Ms BOYNUKARA, Canan Yağmur
15:40	[38] The E332 experiment at FACET-II: first experimental demonstration of beam self-focusing in electron beam - multifoil collisions	MATHERON, Aimé
	[91] Bright solid high harmonic generation on GEMINI PW: unlocking a pathway to SF-QED	TIMMIS, Robin

Parallel Session: Secondary Radiation Source (15:00 - 16:40)

time	[id] title	presenter
15:00	[23] Laser plasma wakefield based axion generation and detection	Prof. CHEN, Min
15:20	[42] Commissioning results of the hard X-ray betatron source at ELI Beamlines	LAMAČ, Marcel
	[75] Ultrashort pulse X-ray absorption spectroscopy using laser-plasma accelerators	KETTLE, Brendan
16:00	[77] Thomson scattering for producing spatiotemporal optical vortices	ALMEIDA, Rafael
	[93] Plasma Density Shaping for Enhanced Electron Beam Control and Brilliant X-ray Generation in Laser Wakefield Acceleration	LUNDH, Olle

Parallel Session: Diagnostics and Plasma Sources (17:00 - 18:40)

time	[id] title	presenter
17:00	[8] Development of gas targets for various laser-plasma experiments	Dr LORENZ, Sebastian
17:20	[74] Development of a High-Sensitivity Wavefront Sensor for KALDERA	NIGGEMEIER, Luisa
17:40	[88] Characterization and recent results of the LWFA driven COXINEL FEL	SCHRAMM, Ulrich
	[89] Diagnosing a metre-scale plasma discharge for plasma wakefield acceleration	COBO, Claudia
	[92] Compact high-resolution multi-GeV electron spectrometer for PW-laser-driven plasma accelerators	CHENG, Xiantao

Parallel Session: Machine Learning, Theory and Simulations (17:00 - 18:40)

time	[id] title	presenter
17:00	[3] Exascale simulations of laser plasma accelerators with PIConGPU	PAUSCH, Richard
17:20	[5] e-e+ plasma generation and dynamics in laser interaction with solid-state target	Prof. PUKHOV, Alexander
17:40	[52] Data-Driven Control and Optimization of High Repetition Rate Laser-Plasma Accelerators	JALAS, Sören

	[62] Simulating relativistic beam-plasma instabilities with the quasistatic PIC code QuaSSis	LABRO, Quentin
18:20	[123] Muon beams with plasma accelerators: challenges and applications	SERAFINI, Luca

Friday, 18 April 2025

Parallel Session: Facilities (15:30 - 16:50)

time	[id] title	presenter
	[87] Laser-plasma accelerator-based free-electron laser program at ELI Beamlines (ELI ERIC)	Dr MOLODOZHENTSEV, Alexander
15:50	[96] Laser Wakefield Acceleration Experiments on the ZEUS Facility	KRUSHELNICK, Karl
16:10	[100] Lifetime of beam-driven wakes at FACET-II	BROOKS, Jason
	[107] Fully synchronized high repetition rate Petawatt laser driver for betatron beamline on EuPRAXIA@SparcLab machine	COURJAUD, Antoine

Parallel Session: Laser Technology (15:30 - 16:50)

time	[id] title	presenter
	[43] Status of the KALDERA drive-laser development for a next generation high repetition rate laser plasma accelerator	Dr PALMER, Guido
15:50	[28] High average power laser plasma acceleration at DESY	Dr KIRCHEN, Manuel
16:10	[66] Development of the L2-DUHA dual output front end at ELI-ERIC	WHITEHEAD, Alex Johannes
16:30	[112] High repetition rate TiSa lasers for laser plasma acceleration	LEROUX, Vincent