Laser-Plasma Accelerators Workshop

Monday, 14 April 2025

Poster Session (17:00 - 18:40)

| [id] title | presenter | board |
|---|-----------------------|-------|
| [48] "Preliminary Study of the X-ray Betatron Radiation Source in the EuAPS Project" | STOCCHI, Federica | |
| [63] Development of a Plasma Cell Target for Higher Repetition Rates in Laser-Plasma Accelerators | SERHAL, Jana | |
| [18] Enabling energy-doubling at CLARA FEBE: High-quality beam generation in plasma wakefield acceleration | SABERI, Hossein | |
| [13] Analytic solutions for plasma expansion into vacuum | Dr BARNA, Imre Ferenc | |
| [41] Prediction of laser-induced breakdown in sub-micron-thick dielectric targets for laser-ion acceleration | ASSENBAUM, Stefan | |
| [76] Laser Acceleration of Protons in Hydrogen Gas Targets using 2 TW laser | TOMKUS, Vidmantas | |
| [97] Compact High-Energy Electron Spectroscopy via Nuclear-Static-Field Deflection | CHENG, Xiantao | |
| [102] Observation of Monoenergetic Electrons from Two-Pulse Ionization Injection in Quasilinear Laser Wakefields | VON DER LEYEN, Marko | |
| [99] Beam-loaded plasma photocathode beams for XFEL application to the water-window and beyond | BERMAN, Lily | |
| [137] Simulation studies in preparation for AWAKE Run 2c | MOREIRA, Mariana | |
| [103] Snapshot Hyperspectral Imaging of low-order chirped harmonics at GEMINI | DENIS, Elliott | |
| [16] Non-destructive charge monitoring in a harsh laser-plasma environment for medical applications | GREGOCKI, David | |
| [17] MACRO Tools for Real-time Analysis of Laser-driven Experiments at ELI-NP | Mx CATANA, Diana | |
| [21] Hybrid accelerator to deliver therapeutic electron beams at high energies | APSIMON, Oznur | |
| [79] ELIMAIA User Beamline: Dedicated Platform for Applications Using Laser-Driven Ion Beams | TRYUS, M. | |
| [90] Optimization of Laser Wakefield Acceleration for High-Quality Electron Beams: Simulations and Experimental Results in Collaboration with HZDR | MASCKALA, Mohamad | |
| [37] Plasma Mirror Operation for Staging Applications | HILLS, Jasmin | |
| [70] High quality electron beams for plasma based light sources. | THAKUR, Bhushan | |
| [50] Realization of plasma photocathode injection in a compact plasma accelerator powered by laser-accelerated electron beams | UFER, Patrick | |
| [78] Ultra-Short Laser Pulses: A Parameter Study for Laser Wakefield Acceleration | Mr D'SOUZA, Flanish | |
| [98] High-Energy OPCPA at Lund Laser Centre and its Application to LWFA | ANGELLA, Andrea | |

| [31] Single-shot spectrometer with pointing angle correction for laser-driven electron beams featuring moderate pointing instability and transverse inhomogeneity | VLACHOS, Simon |
|---|----------------------|
| [19] Heavy-ion-driven plasma wakefield acceleration | Mr LI, Jiangdong |
| [71] High electron charge accelerated in the SM-LWFA regime with the LMJ-PETAL laser | DAVOINE, Xavier |
| [51] Numerical study of the target geometry on the proton-boron fusion yield under direct laser illumination | NICOLAI, Philippe |
| [145] AWAKE: Towards high-energy electrons for particle physics experiments | GSCHWENDTNER, Edda |
| [45] Electron acceleration by Laguerre-Gaussian beams from a high-density dual-staged plasma nozzle | Dr TOMKUS, Vidmantas |
| [147] Experiment Concepts of Heavy-Ion Driven Plasma Acceleration with Muon Beams at the HIAF | LIU, Jie |

Tuesday, 15 April 2025

Poster Session (17:00 - 18:40)

| [id] title | presenter | board |
|---|----------------------|-------|
| [60] Controlled Acceleration of Unstable Particles in Laser-Plasma Wakefields Using Structured Light | BADIALI, Chiara | |
| [151] Updates to the Xopt/Badger Ecosystem for Advanced\\Optimization and Online Control | ROUSSEL, Ryan | |
| [69] Transversely pumped laser driven particle accelerator | NUTTING, Tanner | |
| [94] Production of C-11 for PET imaging using a HRR laser-driven proton source | REIJA, Alicia | |
| [47] Laser-driven very high energy electrons for radiotherapy: beam characterization and radiobiological evaluation | GIACCAGLIA, Camilla | |
| [10] Machine Learning techniques for betatron diagnostics in AWAKE Run 2 | SABERI, Hossein | |
| [106] Versatile, compact and highly stable OPCPA seeder for modern LPA laser drivers | COURJAUD, Antoine | |
| [4] Modeling of axion and electromagnetic fields interaction in particle-in-cell simulations | AN, Xiangyan | |
| [109] Plasma wakefield acceleration of light | THOMAS, Alec | |
| [39] Self-triggered strong-field QED collisions in laser-plasma interaction | MATHERON, Aimé | |
| [27] Relativistic Laser-Driven, Highly Collimated MeV Gamma-Ray and Electron Beam Generation in Plasma Cone Channels. | CHINTALWAD, Sachin | |
| [57] Advancing LWFA Beams for FEL Operation Using Synergies between Experiment, Simulation and Automation | PAUSCH, Richard | |
| [113] A generalized parallelization algorithm for Particle-In-Cell Simulations | FONSECA, Ricardo | |
| [34] Boosted Frame Simulations of Free-electron Lasers | LUO, Runfeng | |
| [58] First ML-Based Start-to-End Simulation of a Plasma Acceleration Facility integrated into Geant4: PALLAS - laser-plasma accelerator test facility | SYTOV, Alexei | |
| [95] Modeling of the electron beam dynamics in an electron beam transport for a laser-plasma accelerator based free-electron laser | MICESKI, Mihail | |
| [72] Mid-Infrared Laser Development for High Intensity Experiments | GUNN, Annabel | |
| [55] Laser experimental profiles initialization in PIC simulations | AVELLA, Federico | |
| [84] An Analysis of Electromagnetic Wave Propagation in a Conducting Cylinder with a Small Aperture | PARK, Chong Shik | |
| [110] Time-resolved betatron imaging of pulsed discharges in water | HUSSEIN, Amina | |
| [20] X-Ray Sources for Fast 3D Tomography Using Laser-Plasma Acceleration | CHAPELANT, Guillaume | |
| [56] Synthetic Optical Imaging for Investigating Injection Radiation in Hybrid LPWFAs | CARSTENS, Finn-Ole | |
| [65] Computational modelling of the semi-classical quantum vacuum in 3D | Ms ZHANG, Zixin | |
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