

## AAC 2016 Poster Session

Board Number	Presenter	Title
1-1S	Mr. COUPERUS, Jurjen	Generation of high charge electron beams by ionization injection
1-2	Dr. XU, Xinlu	Nano-scale electron bunching in laser-triggered ionization injection in plasma accelerators
1-3S	Ms. SWANSON, Kelly	Shock-Front Injection for Laser Plasma Acceleration
1-4	Dr. DEBUS, Alexander	Recent advances in PIconGPU methods for modeling lasers, ionization and radiation
1-5	NAM, Inhyuk	Enhancement of electron energy by laser wakefield acceleration in a density up-ramp
1-6	Mr. WELCH, James	Frequency-Domain Streak Camera Imaging of Laser-Driven Plasma Electron Acceleration Dynamics at a Wavelength of 1.8 Microns
1-7	Mr. ARRAN, Christopher	Results from a New Technique for Fast and Sensitive Measurement of Plasma Wakefields
1-8S	Mr. MITTELBERGER, Daniel	Spectral Phase Effects on Ionization Blueshifting
1-9S	HUSSEIN, Amina	Stimulated Raman backscattering in laser wakefield accelerators
1-10	PENN, Gregory	Beam break-up studies in a hollow plasma channel
1-11	KHUDIK, Vladimir	Direct laser acceleration of electrons in ion-channels/plasma-bubbles with- and without longitudinal wakefield.
1-12S	Mr. ZHANG, Xi	Dual Frequency Laser Wakefield and Direct Acceleration
1-13	Dr. DAVIDSON, Asher	A detailed examination of the scaling laws of the LWFA in the self-guided nonlinear blowout regime
1-14S	Mr. LEE, Patrick	Dynamics of electron injection and acceleration in tailored density profile
1-15S	WEICHMAN, Kathleen	Modeling Laser Wakefield Acceleration on the Texas Petawatt Laser with Multiple Hot Spots
1-17	ELLE, Jennifer	Dual electron beams from laser wakefield acceleration
1-18S	DJORDJEVIC, Blagoje	Laser mode control using leaky plasma channels
1-19S	Mr. HINE, George	Relativistically self-guided laser pulses and spatio-temporal vortices
1-20	ROMANOV, Aleksandr	Laser driven injector of electrons for IOTA.
1-21S	FEDER, Linus	Ionization-injected electron acceleration with sub-terawatt laser pulses
1-22S	SALEHI, Fatholah	MeV electron acceleration at 1 kHz with <10 mJ laser pulses
2-1S	HUEBL, Axel	Leadership-Scale, Open-Source, Full-Scale In-Situ Simulations Beyond GPUs and PFlop/s with PIconGPU

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2-2S	HIGUERA, Adam	Mitigating Particle Integration Error in Relativistic Laser-Plasma Simulations
2-3S	REYES, Jonathan	Applying Boundary Conditions Using a Time-Dependent Lagrangian for Modeling Laser-Plasma Interactions
2-4	STAMM, Alexander	Progress on Variational Formulations for Computational Modeling of Laser-Plasma Interactions
2-5	XU, Xinlu	Boosted frame simulations of LWFA in nonlinear regimes
2-6S	Mr. KIRCHEN, Manuel	Stable modeling of relativistic plasmas with the particle-in-cell method
3-1S	Mr. Kueifu Lai	Progress of Surface Wave Accelerator Based on Silicon Carbide
3-2S	Mr. Moiz Siddiqi	Simulation of Ping-pong Multipactor with Continuous Electron Seeding
3-3S	Mr. Nickolas Sudar	Increasing the trapping efficiency and duty cycle of the Rubicon Inverse Free Electron Laser Accelerator
3-4S	Mrs. Adi Hanuka	Advantages of Artificial Materials for Structure Based Laser Acceleration
4-1	Sergey SHCHELKUNOV	A Self-Focusing, High Transformer Ratio, Collinear Plasma-Dielectric Wakefield Accelerator Driven by a Ramped Bunch Train
4-3	U. SINHA	Polarised radiation emission from relativistic fireball beams
4-4	Weiming AN	Study on emittance growth caused by plasma ion motion
4-5S	Ligia Diana AMORIM	Transverse evolution of positron beams accelerating in hollow plasma channel non-linear wakefields
4-6S	Anton GOLOVANOV	Bubble regime in deep plasma channels
5-1S	Mr. CHANG, Yenyu	Broadband All-Optical Streak Camera Diagnostics of Laser Wakefield Accelerators
5-2S	Mr. DELBOS, Niels	Continuous flow operation of LWFA targets
5-3S	Mr. DANIELS, Joost	Capillary-plasma density diagnostics and control
5-4S	Mr. LUEANGARAMWONG , Anusorn	Experimental development of low-emittance field-emission electron sources
5-5	Dr. HABER, Irv	Experimental and Simulation Study of Barrier Compression on the University of Maryland Electron Ring
5-6	Dr. MONTGOMERY, Eric	Development of Robust Photocathodes
5-7S	DORNMAIR, Irene	Plasma-driven ultrashort bunch diagnostics
6-1S	Mr. CAMPBELL, Paul	Electron acceleration from magnetic reconnection in relativistic laser-plasma interactions
6-2S	Mr. KORDELL, Peter	Target Design for Collisionless Shock Ion Acceleration on the T-Cubed Laser
6-3	Dr. HUANG, Chengkun	Finite grid instability and spectral fidelity of the electrostatic Particle-In-Cell algorithm

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6-4	Dr. GOERS, Andy	Proton acceleration by multi-terawatt laser interaction with a near-critical density hydrogen jet
6-5	Dr. FORESTIER-COLLEONI, Pierre	Heavy ion acceleration using the interaction of a high intensity high contrast laser pulse with sub-micrometer target.
6-6	Dr. KUK, Donghoon	2-D PIC simulation of laser-driven ion acceleration with cluster/droplet targets
7-1S	Ms. HANNASCH, Andrea	Tunable Compton backscattered x-rays from a laser plasma driven MeV electron accelerator
7-2S	Mr. MIAO, Bo	Spatial and temporal study of intense broadband wave-breaking radiation
7-3S	Mr. SHAW, Joseph M.	Collimated, 10-75 MeV Compton backscatter photons from a GeV laser-plasma accelerator
7-4S	Mr. LABERGE, Maxwell	Betatron x-rays from GeV laser-plasma accelerators
7-5S	Mr. HUANG, Chen-kang	Orbital angular momentum in the light emitted from laser plasma interactions
7-6	Dr. YEUNG, Mark	Control of the attosecond pulse generation from overdense plasmas using two-colour fields
7-7	Dr. PALSTRO, John	Plasma lenses for ultrashort multi-petawatt laser pulses
7-8	Mrs. HANUKA, Adi	Optical booster
7-9	BAXEVANIS, Panagiotis	Operation and applications of a plasma wakefield accelerator based on the density down-ramp injection technique
7-10S	Mr. MALYZHENKOV, Alexander	Optimization of Compton source performance through electron beam shaping
7-11S	Mr. MALYZHENKOV, Alexander	Double emittance exchanger as a bunch compressor for the MaRIE XFEL electron beam line at 1 GeV
8-1	Dr. CHEN, Diana	System simulation for ultrafast fiber lasers
8-2S	Mr. PIGEON, Jeremy	Nonlinear optical compression of high power, 10 um CO2 laser pulses in gases and semiconductors
8-3S	WELCH, Eric	Generation of energetic, picosecond seed pulses for CO2 laser using Raman shifter