



# 20th Advanced Accelerator Concepts Workshop

## Monday, November 7, 2022

### WG4: Beam-Driven Acceleration: Session 1 - Salon E (1:30 PM - 3:00 PM)

-Conveners: Spencer Gessner; Jens Osterhoff

time	[id] title	presenter
1:30 PM	[121] Progress towards high-repetition-rate operation of a beam-driven plasma wakefield accelerator	CHAPPELL, James
1:45 PM	[144] Giga-electronvolt Acceleration of Captured Electrons in a Positron Beam-Driven Plasma Wakefield Accelerator	ALLEN, James
2:00 PM	[259] Plasma heating and expansion in PWFA experiments FACET	MARSH, Kenneth
2:15 PM	[137] Observation of Skewed Electromagnetic Wakefields in an Asymmetric Structure Driven by Flat Electron Bunches	LYNN, Walter
2:30 PM	[209] Transverse Stability in an Alternating Gradient Planar Dielectric Wakefield Structure	LYNN, Walter
2:45 PM	[197] Wakefield Acceleration in Nanostructures: The E336 Experiment at FACET-II	ARINIELLO, Robert

## Tuesday, November 8, 2022

### **WG4: Beam-Driven Acceleration: Session 3 - Salon E (1:30 PM - 3:00 PM)**

-Conveners: Spencer Gessner; Jens Osterhoff

time	[id] title	presenter
1:30 PM	[233] Progress towards Energy Doubling and Emittance Preservation through Beam Driven Plasma Wakefield Acceleration at FACET-II	STOREY, Doug
1:45 PM	[86] High-efficiency wake excitation in beam-ionized plasmas at FACET-II	ZHANG, Chaojie
2:00 PM	[81] QPAD modeling of wake excitation and acceleration in meter-long beam-ionized plasma at FACET-II	NIE, Zan
2:15 PM	[58] Focusing of a Long Relativistic Proton Bunch in Underdense Plasma	VERRA, Livio
2:30 PM	[44] Large Energy Depletion of a Beam Driver in a Plasma-Wakefield Accelerator	PEÑA, Felipe
2:45 PM	[148] Plasma-based longitudinal phase space manipulation	WU, Yipeng

# Thursday, November 10, 2022

## **WG4: Beam-Driven Acceleration: Session 7 - Salon E (10:30 AM - 12:00 PM)**

-Conveners: Jens Osterhoff; Spencer Gessner

time	[id] title	presenter
10:30 AM	[194] An Analytic Theory of Chromatic Emittance Growth in a Plasma Wakefield Accelerator	ARINIELLO, Robert
10:45 AM	[85] Dominance of the seed from a tightly-focused electron bunch over the self-modulation of a long proton bunch in an over-dense plasma	MOON, Kook-Jin
11:00 AM	[203] Beam-Driven Dielectric Wakefield Acceleration with a plasma photocathode at the AWA	ANDONIAN, Gerard
11:15 AM	[36] Proof of principle experiments of PV/m plasmonics using structured semiconductors	Prof. SAHAI, Aakash
11:30 AM	[217] Wakefield-based afterburner for increasing the spectral range of X-FELs	MUSUMECI, Pietro
11:45 AM	[211] Experimental Opportunities for the Plasma Wakefield Acceleration in a Narrow Plasma Channel	LEE, Valentina

## **WG4: Beam-Driven Acceleration: Session 8 - Salon E (1:30 PM - 3:00 PM)**

time	[id] title	presenter
1:30 PM	[96] High average gradient in a laser-gated multistage plasma wakefield accelerator	KNETSCH, Alexander
1:48 PM	[52] Emittance preservation in a single PWFA-LC stage using adiabatic plasma density ramp matching sections in the presence of ion motion	ZHAO, Yujian
2:06 PM	[266] Flat beam plasma wakefield accelerator	MANWANI, Pratik
2:24 PM	[257] Acceleration and Focusing of Positrons Using Elongated Bubbles in Warm Plasmas	Prof. SHVETS, Gennady
2:42 PM	[27] Beam-Beam Considerations for Highest-Energy Linear Colliders	GESSNER, Spencer