



# 20th Advanced Accelerator Concepts Workshop

## Monday 07 November 2022

### WG4: Beam-Driven Acceleration: Session 1 - Salon E (13:30-15:00)

-Conveners: Jens Osterhoff; Spencer Gessner

time	[id] title	presenter
13:30	[121] Progress towards high-repetition-rate operation of a beam-driven plasma wakefield accelerator	CHAPPELL, James
13:45	[144] Giga-electronvolt Acceleration of Captured Electrons in a Positron Beam-Driven Plasma Wakefield Accelerator	ALLEN, James
14:00	[259] Plasma heating and expansion in PWFA experiments FACET	MARSH, Kenneth
14:15	[137] Observation of Skewed Electromagnetic Wakefields in an Asymmetric Structure Driven by Flat Electron Bunches	LYNN, Walter
14:30	[209] Transverse Stability in an Alternating Gradient Planar Dielectric Wakefield Structure	LYNN, Walter
14:45	[197] Wakefield Acceleration in Nanostructures: The E336 Experiment at FACET-II	ARINIELLO, Robert

# Tuesday 08 November 2022

## **WG4: Beam-Driven Acceleration: Session 3 - Salon E (13:30-15:00)**

**-Conveners: Jens Osterhoff; Spencer Gessner**

time	[id] title	presenter
13:30	[233] Progress towards Energy Doubling and Emittance Preservation through Beam Driven Plasma Wakefield Acceleration at FACET-II	STOREY, Doug
13:45	[86] High-efficiency wake excitation in beam-ionized plasmas at FACET-II	ZHANG, Chaojie
14:00	[81] QPAD modeling of wake excitation and acceleration in meter-long beam-ionized plasma at FACET-II	NIE, Zan
14:15	[58] Focusing of a Long Relativistic Proton Bunch in Underdense Plasma	VERRA, Livio
14:30	[44] Large Energy Depletion of a Beam Driver in a Plasma-Wakefield Accelerator	PEÑA, Felipe
14:45	[148] Plasma-based longitudinal phase space manipulation	WU, Yipeng

# Thursday 10 November 2022

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

-Conveners: Spencer Gessner; Jens Osterhoff

time	[id] title	presenter
10:30	[194] An Analytic Theory of Chromatic Emittance Growth in a Plasma Wakefield Accelerator	ARINIELLO, Robert
10:45	[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	[203] Beam-Driven Dielectric Wakefield Acceleration with a plasma photocathode at the AWA	ANDONIAN, Gerard
11:15	[36] Proof of principle experiments of PV/m plasmonics using structured semiconductors	Prof. SAHAI, Aakash
11:30	[217] Wakefield-based afterburner for increasing the spectral range of X-FELs	MUSUMECCI, Pietro
11:45	[211] Experimental Opportunities for the Plasma Wakefield Acceleration in a Narrow Plasma Channel	LEE, Valentina

## **WG4: Beam-Driven Acceleration: Session 8 - Salon E (13:30-15:00)**

time	[id] title	presenter
13:30	[96] High average gradient in a laser-gated multistage plasma wakefield accelerator	KNETSCH, Alexander
13:48	[52] Emittance preservation in a single PWFA-LC stage using adiabatic plasma density ramp matching sections in the presence of ion motion	ZHAO, Yujian
14:06	[266] Flat beam plasma wakefield accelerator	MANWANI, Pratik
14:24	[257] Acceleration and Focusing of Positrons Using Elongated Bubbles in Warm Plasmas	Prof. SHVETS, Gennady
14:42	[27] Beam-Beam Considerations for Highest-Energy Linear Colliders	GESSNER, Spencer