



# AAC24 Advanced Accelerator Concepts Workshop

## Monday, 22 July 2024

### **Plenary: Plenary 1 (09:00 - 10:30)**

-Conveners: John Power

time	[id] title	presenter
09:00	[86] The 10 TeV Wakefield Accelerator Collider Design Study [BALLROOM]	GESSNER, Spencer
09:30	[183] Advanced Accelerator Concepts and the 2023 P5 Report [BALLROOM]	Dr GEDDES, Cameron
10:00	[114] Status and Outlook of Advanced Accelerator Concepts Research in Europe [BALLROOM]	HOKKER, Simon

### **Plenary: Plenary 2 (11:00 - 12:30)**

time	[id] title	presenter
11:00	[94] Low divergence and high charge multi-GeV acceleration of electrons with a < 300 TW laser [BALLROOM]	ROCKAFELLOW, Ela
11:30	[36] Multi-GeV monoenergetic electron beams from an optical shock front accelerator [BALLROOM]	KARSCH, Stefan
12:00	[48] High-energy electron beams in optically-formed plasma channels [BALLROOM]	PICKSLEY, Alex

# Tuesday, 23 July 2024

## Plenary: Plenary 3 (09:00 - 10:30)

time	[id] title	presenter
09:00	[42] Attosecond x-ray free-electron lasers utilizing an optical undulator in a self-selection regime [BALLROOM]	Prof. XU, Xinlu
09:30	[62] A Pathway toward a SWFA-based Compact Coherent Light Source [BALLROOM]	Prof. PIOT, Philippe
10:00	[81] Demonstration of a reliable, high gain laser plasma accelerator driven free electron laser [BALLROOM]	BARBER, Sam

## Plenary: Plenary 4 (11:00 - 12:30)

time	[id] title	presenter
11:00	[72] Exploiting novel liquid sheet targets for the generation of bright MeV proton beams [BALLROOM]	PALMER, Charlotte
11:30	[233] Above 150 MeV proton acceleration with 10 PW laser system at ELI NP [BALLROOM]	Dr DORIA, DOMENICO
12:00	[50] Exploration of ultra-high dose rate radiobiology with laser-driven protons at BELLA [BALLROOM]	OBST-HUEBL, Lieselotte

# Wednesday, 24 July 2024

## Plenary: Plenary 5 (09:00 - 10:30)

time	[id] title	presenter
09:00	[46] MeV-scale Dielectric Laser Acceleration	CRISP, Sophie
09:30	[61] Coherently-combined fiber lasers for driving plasma accelerators at kHz repetition rates	Dr ZHOU, Tong
10:00	[34] Overcoming the Limitations of Laser-Wakefield Acceleration with Structured Light Fields	THAURY, Cedric

## Plenary (11:00 - 12:30)

time	[id] title	presenter
11:00	[41] Bunching of relativistic electron beams for superradiant Compton scattering	SCHAAP, Brian
11:30	[44] 3D structure of microbunched electron beams from plasma wakefield accelerators	LABERGE, Maxwell
12:00	[47] Generation of arbitrary bunch shapes using a multileaf collimator and emittance exchange	MAJERNIK, Nathan

# Thursday, 25 July 2024

## Plenary (09:00 - 10:30)

time	[id] title	presenter
09:00	[40] AWAKE: proton driven plasma wakefield acceleration for particle physics applications [BALLROOM]	TURNER, Marlene
09:30	[132] Latest Results on PWFA Experiments from FACET-II [BALLROOM]	ZHANG, Chaojie
10:00	[38] Observation of space-charge field screening in plasma, and other recent experimental results from SPARC_LAB. [BALLROOM]	VERRA, Livio

## Plenary (11:00 - 12:30)

time	[id] title	presenter
11:00	[91] BeamNetUS: Accelerating Beam-Based Research [BALLROOM]	VAF AEI-NAJAFABADI, Navid
11:30	[248] LaserNetUS: opportunities for the AAC community [BALLROOM]	ALBERT, Felicie
12:00	[39] Long-term community engagement with US industry for the next high energy physics collider [BALLROOM]	Dr KAWAI PARKER, Yoko

# Friday, 26 July 2024

## Plenary (09:00 - 10:30)

time	[id] title	presenter
09:00	[43] Summary of the ALEGRO 2024 Workshop at IST	Prof. MUGGLI, Patric
09:30	[129] Summary of the P5 vision for Accelerators	LI, Derun
09:50	[247] A Community-Driven Wakefield Collider Design Study [BALLROOM]	SCHROEDER, Carl JING, Chunguang NANNI, Emilio

## Plenary: Students Presentations (11:00 - 12:30)

time	[id] title	presenter
11:00	[289] Tunable plasma waveguide generation with diffractive axicons for laser wakefield acceleration	TRIPATHI, Nishchal
11:12	[290] Delivering laser-driven proton beams to biological samplest at BELLA iP2	DE CHANT, Jared
11:25	[291] Demonstration of proton bunch self-modulation in a discharge plasma source	AMOEDO, Carolina
11:38	[292] Breakdown insensitive acceleration regime in a metamaterial accelerating structure	MERENICH, Dillon
11:50	[293] Measurement of CSR-affected beams using generative phase space reconstruction	GONZALEZ-AGUILERA, Juan Pablo
12:02	[294] Target metrology of Inertial Confinement Fusion fuel capsules using a Laser Wakefield Acceleration based Betatron X-ray source	PAGANO, Isabella
12:14	[295] Adiabatic plasma lens designs for the final focus of TeV electrons	SU, Qianqian
12:27	[296] list of awards	Prof. PIOT, Philippe