

20th Advanced Accelerator Concepts Workshop

Monday 07 November 2022

WG2: Computation for Accelerator Physics: Session 1 - Salon C (13:30-15:00)

-Conveners: David Bruhwiler; Alexey Arefiev

time	[id] title	presenter
13:30	10-year timetable for AAC computing	
13:50	[169] Traveling-wave electron accelerators – towards scalable laser-plasma accelerators beyond 10GeV	Dr DEBUS, Alexander
14:20	[112] Now that we are ready for Exascale, what can we do with it? PIconGPU for next generation accelerator research.	BUSSMANN, Michael
14:50	Discussion	

Thursday 10 November 2022

WG2: Computation for Accelerator Physics: Session 8 - Salon C (13:30-15:00)

-Conveners: Alexey Arefiev; David Bruhwiler

time	[id] title	presenter
13:30	[189] Eulerian Finite-Difference Vlasov Solver with a Non-Uniform Momentum Grid	Prof. SHADWICK, B. A.
13:45	[42] An Alternative Approach to Incorporating Laser Pulses in Particle-in-Cell Simulations	WEICHMAN, Kathleen
14:00	[281] Opportunities and Issues with the Unitary Particle Pusher	Dr GORDON, Daniel
14:15	[221] Efficient algorithms for multi-level ionization of high-atomic-number gases and applications	CHENG, Aiqi
14:30	[71] EZ: An Efficient, Charge Conserving Current Deposition Algorithm for Electromagnetic Particle-In-Cell Simulations	Dr STEINIGER, Klaus
14:45	Discussion	