



Free Electron Laser Conference FEL2024

August 18-23, 2024 - Warsaw, Poland

	Sunday 18.08.2024	Monday 19.08.2024	Tuesday 20.08.2024	Wednesday 21.08.2024	Thursday 22.08.2024	Friday 23.08.2024
8:00-8:45		Opening	Session 3 - SASE-FEL (110 min)	Session 6 Electron sources (110 min)	Session 10 - Electron diagnostics, timing, synchronization & controls (110 min)	Session 12 -Advanced FEL modes and science applications, (110 min)
8:45-9:20		Richard Walker, (Diamond LS), *In memoriam: Mike Poole (1945-2023)* 8.45-9.00	(I) Commissioning and operation of a CW X-ray SASE FEL at SLAC Yuantao Ding (SLAC)	(I) Commissioning of the SHINE Electron Source Houjun Qian (Zhangjiang Lab)	(I) Measurement with sub-femtosecond resolution of electron and photon beams Philipp Dijkstal (PSI)	(I) Fully Structured light with seeded free-electron lasers Jenny Morgan, (SLAC)
9:20-9:45		Session 1 P1 - First Lasing, New FEL projects and Facility Reports 9.00-10.45	(C) Transformation of FLASH1 to a high repetition rate externally seeded FEL for users Lucas Schaper (DESY)	(I) Overview of the Center for Bright Beams photocathode work Oksana Chubenko (Northern Illinois Univ.)	(I) Efficient 6-dimensional phase space measurements using generative machine learning and applications to autonomous beam monitoring at LCLS-II Ryan Roussel, (SLAC)	(I) X-ray FEL lays the groundwork for Scandium-45 nuclear clock, Yuri Shvyd'ko (ANL)
9:45-10:10		Sven Reiche (PSI/SwissFEL) Thomas Tschentischer (European XFEL) Lucas Shaper (FLASH) Marie Emmanuelle Couprie (SOLEIL) Myung Hoon Cho (PAL-XFEL) Heichun Zen (Kyoto University) Makina Yabashi (SACLAL)	(C) First experience of using corrugated structures at high repetition-rate x-ray free-electron lasers Weilun Qin (DESY)	(C) Breaking Convention: Novel Normal-Conducting Electron Sources for Higher ID Brightness Thomas Lucas (PSI)	(C) ML-driven Automated Tuning of XFEL for Various Experiments and User-specific Requirements at SACLAL Eito Iwai (RIKEN SPRING-8 Center)	(C) Experimental demonstration of attosecond pump-probe spectroscopy with an X-ray free-electron laser Zhaoheng Guo (PSI)
10:10-10:35			(C) Terawatt-attosecond hard X-ray free electron laser pulse generation at the European XFEL Jiawei Yan (EuXFEL)	(C) Novel Photocathode Lasers for the Hard- and Soft-X-ray Free Electron Lasers EuXFEL and FLASH Ingmar Hartl (DESY)	(C) Low-jitter conversion from optical references to electrical radio frequency signals Erik Mansten (MAX IV Laboratory)	(C) Demonstration of tunable, phase-locked X-ray FEL pulses (PSI) Wenxiang Hu
10:35-11:00		Coffee	coffee	coffee	coffee	coffee
		Session 1 P2 - First Lasing, New FEL projects and Facility Reports	Session 4 -Seeded FEL (110 min)	Session 7 - Electron beam dynamics (110 min)	Session 11 - Photon beamline instrumentation & undulators (110 min)	Session 13 Attosecond science - Nobel Prize (110 min)
11:00-11:35		11.10-12.50	(I) Better a chicane today than an undulator tomorrow? Eugenio Ferrari (DESY)	(I) Chicane or arc compressors for FEL? Experience with the MAX IV arc compressors and beyond Sara Thörn (Lund Univ., MAX IV)	(I) Superconducting Undulator developments at the European XFEL Sara Casalbuoni (EuXFEL)	(I) Attosecond capabilities of FELs Agostino Marinelli (SLAC)
11:35-12:00		(I) Conversion to EEHG of the FEL-1 line at FERMI; commissioning results and first experience with user's operations Giuseppe Penco (Elettra)	(I) Microbunching Instability Mitigation Strategies and Diagnostic Methods Alexander Darius Brynes (Elettra)	(I) Microbunching Instability Mitigation Strategies and Diagnostic Methods Alexander Darius Brynes (Elettra)	(I) Diamond sensors for fast pulse-resolved hard x-ray FEL beam position and intensity monitoring Wolfgang Freund (EuXFEL)	(I) Attosecond science at FELs Giuseppe Sansone, (Univ Friburg)
12:00-12:25		Zhirong Huang (LCLS) Zhentang Zhao (SHINE) Chao Feng (SXFEL) Weiqing Zhang (SXFEL) Dave Dunning (UK XFEL) Robert Nietubyc (PoFEL, NCB) Shaikat Khan, (TU Dortmund)	(I) Progress with seeding ATHOS, the soft X-ray FEL at SwissFEL Sven Reiche (PSI)	(I) Recent Progress in Steady-State Micro-Bunching Light Source Development Zhilong Pan (Tsinghua Univ.)	(C) Force-Neutral Adjustable Phase Undulators Nathan Burger (RadiaBeam)	(I) A novel single-shot characterization method for attosecond FEL pulses using self-referenced spectral interferometry Yaocong Xiao (SARI, CAS, China)
12:25-12:50			(C) High-repetition-rate seeded free-electron laser enhanced by self-modulation Hanxiang Yang (Shanghai Institute of Applied Physics)	(I) First measurements of quantum diffusion in an undulator Sergey Tomlin (DESY)	(C) Challenges for the LCLS-II HE Instrument Suites Eliazer Ortiz (SLAC)	(I) Applications of Attosecond Soft-X-ray pulses to Photoemission Chromoscopy and Transient Absorption Hans Jakob Wormer (ETH Zurich)
12:50-14:30		Lunch break	Lunch break	Lunch break	Lunch break	close-out (ends at 13:20)
		Session 2 - FEL theory (110 min)	Session 5 - FEL oscillators & IR-FEL (110 min)	Session 8 - Novel acceleration and FEL concepts (110 min)		
14:30-15:05		(I) Impact of space charge in externally seeded FEL Éléonore Roussel (Lille University)	(I) The cavity based FEL project at the European XFEL Patrick Rauer (DESY)	(I) Plasma accelerating modules developments for the EuPRAXIA FEL user facility Angelo Biagioni (INFN-Laboratori Nazionali di Frascati)	Transfer and visit to National Centre for Nuclear Research (NCBJ) or sightseeing in Warsaw visiting the POLIN Museum	
15:05-15:30		(I) Three-dimensional theory of soliton-like superradiant free-electron lasers River Robles (SLAC)	(I) Progress towards construction of cavity-based XFEL at SLAC Alex Halavanau (SLAC)	(I) Reduction of the electron-beam divergence of laser wakefield accelerators by integrated plasma lenses Arie Irman (HZDR)		
15:30-15:55		(C) The fundamental QED Origin of Bunched Electron Beam Superradiance Aharon Friedman (Ariel University)	(I) Active Q-switched X-Ray Regenerative Amplifier Free-Electron Laser Jingyi Tang (SLAC)	(I) Stable X-ray free-electron lasers based on laser wakefield accelerators and optical undulators Xinlu Xu (Peking Univ.)		
15:55-16:20		(C) Predicting XFEL performance using neural networks with physics constraints Petr Anisimov (Los Alamos National Laboratory)	(I) FEL2024 - 41st International Free Electron Laser Conference Wieland Schöllkopf (FHI Berlin)	(C) Energy and brightness-boosted electron beams from plasma-based accelerators Ahmad Fahim Habib (University of Strathclyde)		
16:20-16:50		coffee	coffee and poster session 16.20-20.30	coffee		
		FEL Prize Talks		Session 9 -Industrial application of FELs - panel discussion		
16:50-17:15				Sandra Bledron (Univ. of New Mexico/Element Arco)		
17:15-17:40		Prof. Ying K. Wu (Duke University) Prof. Brian McNeill (University of Strathclyde)		Raffaella Geometrante (Kyma S.p.A. Italy)		
17:40-18:00		Dr. Svitozar Serkez, (EuXFEL) Dr. Zhen Zhang (SLAC) Advanced Schemes Developed for Free-Electron Laser Applications		Stephen Milton (TAU Systems, Austin, Texas, United States)		Transfer to Warsaw
18:00-18:30		Dr. Jiawei Yan (EuXFEL)	IEC Meeting	Erik Hosler (FyIE)		
18:30-19:00	Registration starts at 18.30					
19:00-20:00	Welcome Reception					
20:00-21:00	19.00-21.30		Dinner IEC		Social Dinner and FEL Prize ceremony 19.30-23.00	
21:00-21:30						