

PROGRAMME

AT A GLANCE



	Sunday 21 August 2022	Monday 22 August 2022	Tuesday 23 August 2022	Wednesday 24 August 2022	Thursday 25 August 2022	Friday 26 August 2022
			Session 3: SASE FELs (Chair: E. Schneidmiller)	Session 6: Electron Sources (Chair: F. Sannibale)	Session 9: Electron Diagn., Timing, Synch. & Controls (Chair: M. Labat)	Session 11: User Experiments (Chair: K. Ueda)
8:45-9:15		Welcome	Cascaded amplification of attosecond X-ray pulses: towards TW-scale ultrafast X-ray FELs <i>Paris Franz (Stanford Univ.)</i>	Review of recent photocathode advancements, <i>Laura Monaco (LASA, Univ. of Milan)</i>	Machine learning-based virtual diagnostic, <i>Adi Hanuka (SLAC)</i>	Probing transient structures of nanoparticles by single-particle X-ray diffraction, <i>Akinobu Niozu (Hiroshima Univ.)</i>
9:15-9:45		In memory of M. Billardon M.-E. Couprie	Short pulses and 2-color capabilities at the SASE3 FEL line of the EU-XFEL, <i>Svitlazar Serkez (EU-XFEL)</i>	First Commissioning of LOLS-II injector, <i>Feng Zhou (SLAC)</i>	Coherent 3D microstructure of laser-wakefield-accelerated electron bunches <i>Maxwell LaBerge (University of Texas, HZDR)</i>	Novel Lattice Instability in Ultrafast Photoexcited SnSe, <i>Yijing Huang (Stanford Univ.)</i>
9:45-10:10		Session 1: First Lasing (Chair: F. Curbis) 1. G. Geloni, 2. E. Prat, 3. A. Trebushinin, 4. M.-E. Couprie, 5. V. Shpakov, 6. W. Wang	Demonstration of enhanced FEL performance with optical klystron and helical undulators, <i>Christoph Kittel (PSI)</i>	Continuous-wave operation of a low-emittance DC-SRF photocathode gun, <i>Senlin Huang (Peking Univ.)</i>	Self-synchronized and cost-effective time-resolved measurements at x-ray FELs with femtosecond resolution, <i>Philipp Dijkstal (PSI)</i>	Ultrafast dynamics in (TaSe ₂) ₂ triggered by optical and x-ray excitation, <i>Federico Clemente (Elettra)</i>
10:10-10:35			Two-Colored FEL generation Using Phase Shifters at Undulator, <i>Myung-Hoon Cho (PAL)</i>	Chirped Pulse Laser Shaping for High Brightness Photoinjectors, <i>Christian Koschitzki (DESY, PITZ)</i>	Ultimate pulse-to-pulse stability in non-linear bunch compressors, <i>Erik Mansten (MAX IV)</i>	FLASH2020+ Pump-Probe Laser Upgrade: Concept and Current Status <i>Skimantas Alisauskas (DESY)</i>
10:35-11:00		Coffee & Exhibition	Coffee & Exhibition	Coffee & Exhibition	Coffee & Exhibition	Coffee & Exhibition
			Session 4: Seeded FELs (Chair: R. Hajima)	Session 7: Electron Beam Dynamics (Chair: S. Thorin)	Session 10: Photon Beamline Instrum. & Undulators (Chair: J. Gruenert)	Session 12: End-to-end Experiments (Chair: F. Capotondi)
11:00-11:30		FEL Prize Talks (Chair: V. Litvinenko) 1. G. Stupakov, 2. E. Allaria, 3. A. Lumpkin, 4. C. Fang, 5. J. Duris	Coherent and ultrashort soft x-ray pulses from echo-enabled harmonic cascade FEL, <i>Chao Feng (SINAP)</i>	Comparison of Eulerian, Lagrangian and Semi-Lagrangian Simulations of Phase-Space Density Evolution <i>Philipp Amstutz (DESY)</i>	Development of APPLE-III Undulators for FLASH, <i>Markus Tischer (DESY)</i>	Experiments with phase-controlled multi-pulses from FERMI, <i>Carlo Callegari (Elettra)</i>
11:30-12:00	Enhanced Self-Seeding with Ultrashort Electron Beams, <i>Zhen Zhang (SLAC)</i>		First evidence of intrabeam scattering in an electron linac and impact on short wavelength FELs, <i>Giovanni Perosa (Univ. of Trieste, Elettra)</i>	XFEL sub-10 nm focusing mirror system at SACLA for achieving 10 ²² W/cm ² intensity, <i>Junpei Yamada (Osaka Univ.)</i>	Observation of coherent electronic motion with X-ray FELs, <i>James P. Cryan (SLAC)</i>	
12:00-12:25	Comparison of transverse coherence properties in seeded and unseeded FEL, <i>Mihai Pop (MAX IV)</i>		Energy spread blow-up by intra-beam scattering and micro-bunching at the SwissFEL injector, <i>Eduard Prat (PSI)</i>	Ringdown Demonstration of a Low-Loss 14 m Hard X-ray Cavity <i>Rachel Margraf (Stanford Univ.)</i>	The role of light possessing orbital angular momentum in ptychographic imaging experiments, <i>Matteo Pancaldi (Elettra)</i>	
12:25-12:50	First observation of laser-beam interaction in a dipole magnet, <i>Jiawei Yan (EU-XFEL)</i>		Characterization of the European XFEL pulses in the presence of Microbunching instability, <i>Najmeh Mirian (EU-XFEL)</i>	AC/DC: the FERMI FEL split and delay optical device for ultrafast X-Ray science, <i>Alberto Simoncig (Elettra)</i>	A perfect X-ray beam splitter and its applications to time-domain interferometry and quantum optics exploiting FELs, <i>Sven Reiche (PSI)</i>	
12:50-14:10	Lunch break		Lunch break	Lunch break	Lunch break	Lunch break
		Session 2: FEL Theory (Chair: A. Gover)	Session 5: FEL Oscillators and IR-FELs (Chair: Y. K. Wu)	Session 8: Novel Acceleration and FEL Concepts (Chair: A. Zholents)	Transfer and visit to Elettra Sincrotrone Trieste	
14:10-14:40	Population inversion X-ray laser oscillator at LCLS, <i>Aliaksei Halavanau (SLAC)</i>	Observation of Bunham-Chiao ringing with pi-phase jumps in a high-efficiency superradiance FEL oscillator, <i>Heishun Zen (IAE, Kyoto Univ.)</i>	Free-electron Lasing Based on a Laser Wakefield Accelerator, <i>Wentao Wang (SIOM, CAS)</i>			
14:40-15:10	Attosecond polarization modulation of x-ray radiation in a free-electron laser, <i>Jenny Morgan (Univ. of Strathclyde, SLAC)</i>	FEL Lasing below 170 nm using an oscillator, <i>Ying Wu (Duke Univ.)</i>	First SASE and Seeded FEL Lasing based on a beam driven wakefield accelerator, <i>Mario Galletti (University of Rome "Tor Vergata", INFN-LNF)</i>			
15:10-15:35	Proposal for a Quantum Free Electron Laser driven by Ultracold Electrons <i>Brian H. Schaap (TU/e)</i>	Single pass high efficiency THz FEL, <i>Andrew Fisher (PBPL)</i>	First laser plasma accelerator based seeded FEL, <i>Marie Labat (SOLEIL)</i>			
15:35-16:00	Quantum diffusion in coherent radiation, <i>Gennady Stupakov (SLAC)</i>	THz FEL oscillator synchronized soft X-rays via Thomson back-scattering: a new dual source technique, <i>Vittoria Petillo (Univ. of Milan, INFN)</i>	Bridging the gap of storage ring light sources and linac-driven FELs, <i>Simone Di Mitri (Elettra, Univ. of Trieste)</i>			
16:00-17:30	Registration	Coffee, Posters & Exhibition	Coffee, Posters & Exhibition	Coffee, Posters & Exhibition		
17:30-18:00						
18:00-19:00		Tutorial 1		Tutorial 2		Transfer to Trieste
19:00-20:00			IEC Meeting			
20:00-21:00		Welcome Reception		Dinner IEC & Chairs		Social Dinner and FEL Prize ceremony
21:00-22:00						