PROGRAMME AT A GLANCE

FEL2022

	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 *Paris Franz (Stanford Univ.)*	Review of recent photocathode advancements, *Laura Monaco (LASA, Univ. of Milan)*	Machine learning-based virtual diagnostic, *Adi Hanuka (Eikon Therapeutics)*	Probing transient structures of nanoparticles by single-particle X-ray diffraction, *Akinobu Niozu (Hiroshima Univ.)*
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, *Svitozar Serkez (EU-XFEL)*	First Commissioning of LCLS-II Injector, *Feng Zhou (SLAC)*	Coherent 3D microstructure of laser-wakefield-accelerated electron bunches *Maxwell LaBerge (University of Texas, HZDR)*	Novel Lattice Instability in Ultrafast Photoexcited SnSe, *Yijing Huang (Stanford Univ.)*
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. P. Musumeci*	Demonstration of enhanced FEL performance with optical klystron and helical undulators, *Christoph Kittel (PSI)*	Continuous-wave operation of a low-emittance DC-SRF photocathode gun, *Senlin Huang (Peking Univ.)*	Self-synchronized and cost-effective time-resolved measurements at x-ray FELs with femtosecond resolution, *Philipp Dijkstal (PSI)*	Ultrafast dynamics in $(TaSe_4)_2I$ triggered by optical and x-ray excitation, *Federico Cilento (Elettra)*
10:10-10:35			Two-Colored FEL generation Using Phase Shifters at Undulator, *Myung-Hoon Cho (PAL)*	Chirped Pulse Laser Shaping for High Brightness Photoinjectors, *Christian Koschitzki (DESY, PITZ)*	Ultimate pulse-to-pulse stability in non-linear bunch compressors, *Erik Mansten (MAX IV)*	FLASH2020+ Pump-Probe Laser Upgrade: Concept and Current Status *Skirmantas Ališauskas (DESY)*
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. J. Duris, 5. C. Feng*	Coherent and ultrashort soft x-ray pulses from echo-enabled harmonic cascade FEL, *Chao Feng (SINAP)*	Comparison of Eulerian, Lagrangian and Semi-Lagrangian Simulations of Phase-Space Density Evolution *Philipp Amstutz (DESY)*	Development of APPLE-III Undulators for FLASH, *Markus Tischer (DESY)*	Experiments with phase-controlled multi-pulses from FERMI, *Carlo Callegari (Elettra)*
11:30-12:00			Enhanced Self-Seeding with Ultrashort Electron Beams, *Zhen Zhang (SLAC)*	First evidence of intrabeam scattering in an electron linac and impact on short wavelength FELs, *Giovanni Perosa (Univ. of Trieste, Elettra)*	XFEL sub-10 nm focusing mirror system at SACLA for achieving 10^{22} W/cm^2 intensity, *Jumpei Yamada (Osaka Univ.)*	Observation of coherent electronic motion with X-ray FELs, *James P. Cryan (SLAC)*
12:00-12:25			Comparison of transverse coherence properties in seeded and unseeded FEL, *Mihai Pop (MAX IV)*	Energy spread blow-up by intra-beam scattering and micro-bunching at the SwissFEL injector, *Eduard Prat (PSI)*	Ringdown Demonstration of a Low-Loss 14 m Hard X-ray Cavity *Rachel Margraf (Stanford Univ.)*	The role of light possessing orbital angular momentum in ptychographic imaging experiments, *Matteo Pancaldi (Elettra)*
12:25-12:50			First observation of laser-beam interaction in a dipole magnet, *Jiawei Yan (EU-XFEL)*	Characterization of the European XFEL pulses in the presence of Microbunching instability, *Najmeh Mirian (EU-XFEL)*	AC/DC: the FERMI FEL split and delay optical device for ultrafast X-Ray science, *Alberto Simoncig (Elettra)*	A perfect X-ray beam splitter and its applications to time-domain interferometry and quantum optics exploiting FELs, *Sven Reiche (PSI)*
12:50-14:10		**Lunch break**	**Lunch break (SPC Lunch Meeting)**	**Lunch break**	**Lunch break**	**Close-out (ends at 13:00)**
		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: E. Roussel)**		
14:10-14:40		Population inversion X-ray laser oscillator at LCLS, *Aliaksei Halavanau (SLAC)*	Observation of Burnham-Chiao ringing with pi-phase jumps in a high-efficiency superradiance FEL oscillator, *Heishun Zen (IAE, Kyoto Univ.)*	Free-electron Lasing Based on a Laser Wakefield Accelerator, *Wentao Wang (SIOM, CAS)*	**Transfer and visit to Elettra Sincrotrone Trieste**	
14:40-15:10		Attosecond polarization modulation of x-ray radiation in a free-electron laser, *Jenny Morgan (Univ. of Strathclyde, SLAC)*	FEL Lasing below 170 nm using an oscillator, *Ying Wu (Duke Univ.)*	First SASE and Seeded FEL Lasing based on a beam driven wakefield accelerator, *Mario Galletti (University of Rome "Tor Vergata", INFN-LNF)*		
15:10-15:35		Proposal for a Quantum Free Electron Laser driven by Ultracold Electrons *Brian H. Schaap (TU/e)*	Single pass high efficiency THz FEL, *Andrew Fisher (PBPL)*	First laser plasma accelerator based seeded FEL, *Marie Labat (SOLEIL)*		
15:35-16:00		Quantum diffusion in coherent radiation, *Gennady Stupakov (SLAC)*	THz FEL oscillator synchronized soft X-rays via Thomson back-scattering: a new dual source technique, *Vittoria Petrillo (Univ. of Milan, INFN)*	Bridging the gap of storage ring light sources and linac-driven FELs, *Simone Di Mitri (Elettra, Univ. of Trieste)*		
16:00-17:30		**Coffee, Posters & Exhibition**	**Coffee, Posters & Exhibition**	**Coffee, Posters & Exhibition**		
17:30-18:00	**Registration**	**Tutorial 1 (Chair: C. Blasetti): How to expand your research network and write a successful project proposal. B. Redlich, S. Jacquemot, C. Blasetti**		**Tutorial 2 (Chair: G. De Ninno) Meeting the editor. Serena Dalena (Physical Review Letters) Oliver Graydon (Nature Photonics)**		
18:00-19:00	**Welcome Reception**		**IEC Meeting**		**Transfer to Trieste**	
19:00-20:00					**Social Dinner and FEL Prize ceremony**	
20:00-21:00			**Dinner IEC & Chairs**			
21:00-22:00						