FEL2019 Program

Universität Hamburg, Main Building

Monday 26.8.2019

Start	Length	
08:00	02:00	Registration
10:00	00:00	Welcome Addresses Chair: W. Decking, H. Sinn
10:00	00:15	Welcome Address Katharina Fegebank, 2nd Mayor City of Hamburg and Senator for Science, Research and Equality
10:15	00:10	Welcome Addresses Robert Feidenhans'l, Chairman of EuXFEL Management Board Wim Leemans, Director of DESY Accelerator Division
MOA		Memorial Talk Chair: W. Decking, H. Sinn
10:25	00:15	In memorial Alberto Renieri: Riding the FEL Instability Marie-Emmanuelle Couprie for Guiseppe Dattoli
MOA		First Lasing Chair: W. Decking, H. Sinn
10:40	00:05	First Lasing of a Free Electron Laser in the Soft X-Ray Spectral Range With Echo Enabled Harmonic Generation Enrico Allaria
10:45	00:05	First Lasing at the CAEP THz FEL Facility Peng Li
10:50	00:05	First Lasing at the SASE2 and SASE3 FELs of European XFEL Matthias Scholz
10:55	00:05	First Lasing at SXFEL Bo Liu
11:00	00:05	Commissioning of CW FEL Amplifier for Coherent Electron Cooler Vladimir N. Litvinenko
11:05	00:05	Commissioning Status of FELiChEM, an IR-FEL User Facility in China Heting Li
11:30	00:30	Coffee Break
MOB		Status of projects and facilities 1 Chair: S. Schreiber
12:00	00:30	Operation Status and Future Perspective of Warm XFEL Hitoshi Tanaka
12:30	00:30	Overview on Future Continuous Wave X-Ray Free Electron Lasers Hans Weise
13:00	01:30	Lunch Break
MOC		FEL 2017 Prize Talks Chair: D. Wang
14:30	00:20	Regenerative Amplifier FEL - From IR to X-Rays Dinh C. Nguyen
14:50	00:40	Microbunching Instability and Laser Heater Impact on Seeded Free Electron Lasers Eléonore Roussel, Eugenio Ferrari
15:30	00:20	Accelerator Challenges for XFELs With Very High X-Ray Energies Bruce Carlsten
15:50	00:25	Coffee Break
MOD		FEL Theory Chair: J. Wu
16:15	00:30	Physics of Post-Saturation Tapered FEL Towards Single-Frequency Terawatt Output Power Cheng-Ying Tsai
16:45	00:30	Microbunch Rotation and Coherent Undulator Radiation From a Kicked Electron Beam James MacArthur
17:15	00:15	Hanbury Brown and Twiss Interferometry at XFEL Sources Ivan Vartaniants
17:30	00:15	Post-Saturation Dynamics of a Superradiant Spike in a Free-Electron Laser Amplifier Xi Yang
17:45	01:15	Break
19:00		Welcome Reception

Tuesday 27.8.2019

Start	Length	
TUA		SASE FEL Chair: E. Prat
09:00	00:30	Parallel Operation of SASE1 and SASE3 at European XFEL Shan Liu
09:30	00:30	Two-Pulse Schemes in Soft and Hard X-Ray FELs: Robustness Analysis of State-of-the-Art Solutions Alberto Lutman
10:00	00:15	Generation of Sub-Femtosecond X-Ray Pulses at SwissFEL Alexander Malyzhenkov
10:15	00:15	Harmonic Lasing Experiment at the European XFEL Evgeny Schneidmiller
10:30	00:30	Coffee Break
TUB		Seeded FEL Chair: S. Werin
11:00	00:30	Echo-Enabled Harmonic Generation Lasing of the FERMI FEL in the Soft X-Ray Spectral Region Primoz Rebernik Ribič
11:30	00:30	Reflection Self-Seeding at SACLA Toru Hara
12:00	00:30	Hard X-Ray Self-Seeding at PAL-XFEL Chang-Ki Min
12:30	00:15	Generation and Measurement of Intense Few-Femtosecond Superradiant Soft X-Ray Free Electron Laser Pulses Simone Spampinati
12:45	01:30	Lunch Break
TUP		Poster Session 1
14:15	01:30	FEL Theory SASE FEL Seeded FEL FEL oscillators and long wavelengths FEL
15:45	00:30	Coffee Break
TUD		FEL oscillators and long wavelengths FEL Chair: O. Shevchenko
16:15	00:30	Generating Orbital Angular Momentum Beams in an FEL Oscillator Ying K. Wu
16:45	00:30	Application of Infrared FEL Oscillators for Producing Isolated Attosecond X-Ray Pulses via High-Harmonic Generation in Rare Gases Ryoichi Hajima
17:15	00:15	Fine and Hyperfine Structure of FEL Emission Spectra Vitaly V. Kubarev
17:30	00:15	Cavity-Based Free-Electron Laser Research and Development Gabriel Marcus
17:45	00:15	Break
TUT		Tutorial Chair: S. Schreiber
18:00	01:00	Coherent Spontaneous Superradiance and Stimulated-Superradiant Emission of Bunched Electron Beams Avi Gover
19:00		End of session

Wednesday 28.8.2019

Start	Length	
WEA		Electron sources Chair: B. Carlsten
09:00	00:30	Overview on CW RF Gun Developments for Short Wavelength FELs Houjun Qian
09:30	00:30	State-of-the-Art Photocathodes and New Developments Nathan Moody
10:00	00:15	Emittance Budget in the Transition Regime Between Linear Emission and Space Charge Dominated Photoemission Ye Chen
10:15	00:15	Growing and Characterization of Cs2Te Photocatodes With Different Thicknesses at INFN LASA Laura Monaco
10:30	00:30	Coffee Break
WEB		Electron diagnostics, timing, synchronization, and controls Chair: A. Lumpkin
11:00	00:30	Identification and Mitigation of Smoke-Ring Effects in Scintillator-Based Electron Beam Images at the European XFEL Gero Kube
11:30	00:30	Wire-Scanners with Sub-Micrometer Resolution: Developments and Measurements Gian Luca Orlandi
12:00	00:30	Application of Machine Learning to Beam Diagnostics Elena Fol
12:30	00:15	Few-Femtosecond Facility-wide Synchronization of the European XFEL Sebastian Schultz
12:45	01:30	Lunch Break
WEP		Poster Session 2
14:15	01:30	Electron Sources Electron diagnostics, timing, synchronization, and controls Photon beamline instrumentation and undulators
15:45	00:30	Coffee Break
WED		Photon beamline instrumentation and undulators Chair: J. Grünert, S. Schreiber
16:15	00:30	Experience with Short-Period, Small Gap Undulators at the SwissFEL Aramis Beamline Thomas Schmidt
16:45	00:30	Absorbed Radiation Doses on the European XFEL Undulator Systems During Early User Experiments Frederik Wolff-Fabris
17:15	00:15	Pulse resolved photon diagnostics at MHz repetition rates Jan Grünert
17:30	00:15	Undulator Adjustment with the K-Monochromator System at the European XFEL Wolfgang Freund
17:45	00:15	Break
WET		Tutorial Chair: A. Lumpkin
18:00	01:00	Photon Transport Beamline Design Harald Sinn
19:00		End of session

Thursday 29.8.2019

Start	Length	
THA		FEL applications Chair: Y.U. Jeong
09:00	00:30	Serial Femtosecond Crystallography at MHz XFELs Marie Luise Gruenbein
09:30	00:30	Searching for the Hypothesized Liquid-Liquid Critical Point in Supercooled Water with X-ray Free Electron Laser Kyung Hwan Kim
10:00	00:30	IR-FEL Project at the cERL and Future EUV-FEL Lithography Ryuko Kato
10:30	00:15	Ultrafast Magnetization Dynamics at the Low-Fluence Limit Supported by External Magnetic Fields Matthias Riepp
10:45	00:30	Coffee Break
THB		Electron beam dynamics Chair: S. Bettoni
11:15	00:30	Using an E-SASE Compression to Suppress Microbunch Instability and Resistive-Wall Wake Effects Petr Anisimov
11:45	00:30	Understanding 1-D to 3-D Coherent Synchrotron Radiation Effects Alexander Brynes
12:15	00:15	Emittance Measurements and Minimization at SwissFEL Philipp Dijkstal
12:30	00:15	Longitudinal Phase Space Study on Injector Beam of High Repetition Rate FEL Qiang Gu
12:45	01:30	Lunch Break
THP		Poster Session 3
14:15	01:30	FEL applications Electron beam dynamics Novel concepts and techniques Status of projects and facilities
15:45	00:30	Coffee Break
THD		Novel concepts and techniques Chair: R. Geometrante
16:15	00:30	From Femtosecond to Attosecond Coherent Undulator Pulses Vitaly Goryashko
16:45	00:30	Attosecond Pulses From Enhanced SASE at LCLS Agostino Marinelli
17:15	00:30	FEL Optimization: From Model-Free to Model-Dependent Approaches and ML Prospects Sergey Tomin
17:45	00:15	A Novel Optical Undulator Using Array of Pulse-Front Tilted Laser Beams Weihao Liu
18:00	01:00	Break
19:00		Conference Dinner

DESY, Auditorium

Friday 30.8.2019

Start	Length	
FRA		Status of projects and facilities 2 Chair: L. Giannessi
09:00	00:30	FEL Operation at the European XFEL Facility Dirk Noelle
09:30	00:30	LCLS-II - Status and Upgrades Axel Brachmann
10:00	00:30	FLASH - Status and Upgrades Juliane Roensch-Schulenburg
10:30	00:30	Status of SXFEL Test and User Facilities Zhentang Zhao
11:00	00:30	Concluding remarks Intro Lab Visits
11:30	00:30	Coffee Break
12:00	05:00	Laboratory visits EuXFEL, FLASH
00:00	00:00	End of Conference