Scheduled experiments - Run 202301

February - June 2023

ID	Title	Main Proposer / Principal Investigator	Instrument
3459	Understanding the role of exchange coupling during photoinduced charge transfer in FeMn dimers	Dr. Rebeca Gomez Castillo	FXE SASE1
3435	Structure and electronic properties of excited states in CeO2	PD Dr. Paola Luches	FXE SASE1
3409	Study ultrafast dynamics in thin films of spin crossover nanocrystals using ultrafast serial X-ray crystallography and X-ray emission spectroscopy	Dr. Yifeng Jiang	FXE SASE1
3338	Probing the structural dynamics of water using femtosecond X-ray solution scattering	PD Dr. Qingyu Kong	FXE SASE1
3323	Dynamics of nanoscale phenomena in solids and liquids studied with X-ray Transient Gratings at European XFEL (joint FXE/MID) (Long-Term Project)	Dr. Cristian Svetina	FXE SASE1
3279	Mapping the excitation-specific electron, spin and lattice dynamics in spinel Co3O4 thin films with femtosecond non-resonant emission spectroscopy and diffraction	Dr. Oliviero Cannelli / Prof. Dr. Giulia F Mancini	FXE SASE1
3273	Turning water into glass	Mr. Tobias Eklund / Prof. Dr. Katrin Amann-Winkel	FXE SASE1
3455	Diamond high-precision X-ray polarimeter for the detection of vacuum birefringence	Dr. Robert Lötzsch / Dr. Ingo Uschmann	HED SASE2
3449	Diagnosing relativistic surface plasmon propagation using GISAXS	Dr. Sripati Venkata Rahul / Mr. Mohammadreza Banjafar	HED SASE2
3430	Ionization dynamics in relativistic Cu plasmas	Dr. Ulf Zastrau / Mr. Mikhail D Mishchenko	HED SASE2
3406	Determination of the carbon phase diagram using single pulsed laser heating in a diamond anvil cell in combination with MHz X-ray diffraction	Prof. Dr. Clemens Prescher	HED SASE2
3386	Kinetics and dynamics of fast transformations at extreme conditions	Dr. Elena Bykova / Dr. Alexander F Goncharov	HED SASE2
3379	Unveiling unknown phases and crystallization pathways in H2O under fast compression using the dynamic diamond anvil cell (dDAC)	Dr. Minju Kim / Prof. Dr. Geun Woo Lee	HED SASE2
3326	Axion searches using an X-ray free electron laser	Prof. Dr. Gianluca Gregori	HED SASE2
3285	Ultrafast X-ray heating study: dynamics of (fluorescent) diamond formation from (doped) diamondoids under a static high-pressure environment	Dr. Yu Lin / Prof. Dr. Wendy L Mao	HED SASE2
2740	Dynamic Compression of Materials on HED at Unprecedented Rates using the DiPOLE Laser	Dr. Karen Appel / Prof. Dr. Malcolm I McMahon	HED SASE2
3422	Proposal for experiment at European XFEL – Experiment description Probing Pre-Hydrate Cage Formation	Robert Bauer / Dr. Felix Lehmkühler	MID SASE2

3381	Ultrafast strain from spin and lattice dynamics in Strontium Ruthenate	Dr. Jan-Etienne Pudell / Prof. Dr. Matias Bargheer	MID SASE2
3348	MHz XPCS enabled studies of dynamics, interactions and aggregation phenomena in protein solutions (Long-Term Project)	Prof. Dr. Christian Gutt	MID SASE2
3346	Radiation effects in phase change materials	Dr. Peihao Sun / Prof. Dr. Giulio Monaco	MID SASE2
3334	Multiphoton Collective Lambshift in Nuclear Resonant Scattering	Prof. Dr. Ralf Roehlsberger / Prof. Dr. Jörg Evers	MID SASE2
3331	Excitation of Magnetic Domains in Sr2IrO4	Prof. Dr. Ian Robinson	MID SASE2
3303	Ultrafast X-ray Photon Correlation Spectroscopy - a Community Proposal - II	Dr. Claudia Goy / Prof. Dr. Foivos Perakis	MID SASE2
3493 ex 2843	Dynamics in supercooled liquids using hard X-ray self-seeding	Francesco Dallari / Dr. Felix Lehmkühler	MID SASE2
3494 ex 2853	Structural rearrangements during de-excitation of a self-trapped exciton in vitreous silica	Mr. Alessandro Martinelli / Prof. Dr. Giulio Monaco	MID SASE2
3463	Revealing the post-nucleation growth dynamics of ultrafast laser-induced topological magnetic phase transitions	Dr. Felix Büttner / Dr. Bastian Pfau	SCS SASE3
3423	Ultrafast Transient Soft X-ray Absorption Spectroscopy in Solution at MHz Repetition Rate for Dilute Systems and Biomolecules	Dr. Loic Le Guyader	SCS SASE3
3397	Ultrafast non-local relaxation of bio-relevant metal ions in water	Prof. Dr. Olle Björneholm	SCS SASE3
3390	Revealing the heterogeneous ultrafast dynamics of liquid water using RIXS	Dr. Robin Tyburski / Prof. Dr. Anders Nilsson	SCS SASE3
3360	Is spin-lattice angular momentum transfer possible in nanoscale spin textures?	Dr. Alexander Yaroslavtsev / Prof. Dr. Hermann A Dürr	SCS SASE3
3301	Identifying excited-state bottlenecks in ligand dissociation for homogeneous C-H activation catalysis with 3d transition-metal complexes	Dr. Raphael M Jay / Prof. Dr. Philippe Wernet	SCS SASE3
3378	Revealing structural motifs that control ice growth upon spontaneous crystallization	Dr. Jonas A Sellberg	SPB/SFX SASE1
3376	Femtosecond time-resolved structural studies of photoconversion in plant phytochromes	Prof. Dr. Jon Hughes / Prof. Dr. Karsten Heyne	SPB/SFX SASE1
3373	Enhanced resonant elastic scattering from inner-shell population-inverted Cu atoms probed by superfluorescent x-ray pulses	Mr. Daniele Ronchetti / Prof. Dr. Nina Rohringer	SPB/SFX SASE1
3333	Optimization of size and quality of Photosystem II crystals with 400nm beam focus	Prof. Dr. Petra Fromme	SPB/SFX SASE1
3492 ex 2805	Time-resolved structural studies of optogenetic tools at European XFEL (derived from 2805)	Prof. Dr. Valentin Gordeliy	SPB/SFX SASE1
3330	Time-resolved structural studies of optogenetic tools at European XFEL	Prof. Dr. Valentin Gordeliy / Dr. Kirill Kovalev	SPB/SFX SASE1
3244	Structural Biology of Bacterial Insecticides	Dr. Dominik Oberthür / Prof. Dr. Colin Berry	SPB/SFX SASE1

3264	Characterization of microcrystals of tRNA maturation enzymes	Dr. Claude Sauter	SPB/SFX SASE1 (Protein Crystal Screening)
3456	Few-femtosecond-resolved two-color pump-probe measurements of hydrogen migration and roaming in small alcohols	Dr. Florian Trinter / Prof. Dr. Fernando Martin	SQS SASE3
3408	Catalytic trihydrogen formation from water on nanoparticle surfaces	Dr. Adam Summers	SQS SASE3
3384	Ultrafast ring opening and charge transfer in photo-excited spiropyran probed via time-resolved X-ray photoelectron spectroscopy	Dr. Saikat Nandi	SQS SASE3
3315	Non-linear multiphoton excitation and ionization of highly charged ions using high intensity XFEL pulses	Mr. Moto Togawa / PD Dr. José R. Crespo López-Urrutia	SQS SASE3
3298	Single-electron nanoplasma seeding probed by ultrafast X-ray coherent diffractive imaging	Dr. Oliver Gessner	SQS SASE3
3295	Ultrafast, atom-resolved probes of aqueous hydrogen bond dynamics	Prof. Dr. Olle Björneholm	SQS SASE3
3090	Coulomb explosion imaging of trans-cis isomerization in molecular photoswitches	Dr. Kasra Amini	SQS SASE3