

Scheduled experiments - Run 202101

Feb-June 2021

ID	Title	Main Proposer / Principal Investigator	Instrument
2189/2743	Single-shot visualization of the multi-centre ultrafast response in photoexcited spinel Co ₃ O ₄ by femtosecond non-resonant XES and diffraction	G. F. Mancini / M. Chergui	FXE SASE1
2478	Photophysics of the highly NIR luminescent molecular ruby revealed by ultrafast measurements at the XFEL	M. Bauer	FXE SASE1
2383 / 2744	Intra- and intermolecular electronic and structural dynamics of solvated molecules by a combination of fs-XES and anisotropic fs-XRS	C. Bacellar Cases da Silveira / M. Chergui	FXE SASE1
2359 / 2742	Investigating the onset of photoinduced polaron formation in lead-free halide nanoparticles using femtosecond X-ray scattering and spectroscopy	S. E Canton	FXE SASE1
2536	Mapping decoherence pathways following an ultrafast CDW phase transition	L. Boie / S. Johnson	FXE SASE1
2503	Out-of-equilibrium structural dynamics of the spin and charge density waves of chromium probed at the femtosecond time scale	V. Jacques	FXE SASE1
2621	User community assisted commissioning of the UHI Laser at HED, impact of relativistic plasma environment on x-ray diagnostics	T. Toncian	HED SASE2
2586	Free electron degeneracy and collisional rates in solid density plasmas	G. O. Williams / M. Fajardo	HED SASE2
2592	Kinetics of structural phase transition in the dynamic-diamond anvil cell (dDAC): bridging static and shock compression	Z. Jenei / H.-P. Liermann	HED SASE2
2605	MHz diffraction and single shot heating experiments in the DAC, using pulsed IR laser or X-rays	C. Prescher / G. Morard	HED SASE2
2590	X-ray Heating of low-Z Materials at High Static Pressures	R. J. Husband / M. I. McMahon	HED SASE2
2656	The transient response of solids under impulsive excitation	Mr. Lennart P Wollenweber / G. Gregori	HED SASE2
2452 / 2739	Hard X-ray imaging polarimeter	H.-P. Schlenvoigt	HED SASE2
2353 / 2738	A Spectroscopic Study of Solid-density HED Plasmas Isochorically Heated by Nano-focused FEL X-rays	Hae Ja Lee	HED SASE2
2595	Fluctuation of the Polar Nanodomains in Lead Magnesium Niobate Relaxor Ferroelectric	I. Robinson	MID SASE2
2655	Dynamics of oxygen-induced shape changes of supported Palladium nanoparticles	S. Chung / A. Stierle	MID SASE2
2638	Observation of a traveling soliton lattice in sliding charge density wave systems	D. Le Bolloc'h	MID SASE2
2534	Hard X-ray Induced Demagnetization in Ferrimagnetic DyCo Alloy Thin Films	L. Müller / G. Grübel	MID SASE2

2467 / 2745	The XFEL pulse-train structure enables time-resolved serial fs crystallography of the water splitting process in Photosystem II	P. Fromme	SPB/SFX SASE1
2324	Time-resolved serial femtosecond crystallography studies of the mechanism of oxygen reduction by cytochrome c oxidase.	R. Neutze	SPB/SFX SASE1
2439 / 2746	Perovskite Quantum Dot Lattice Dynamics	K. Ayyer / H. Lange	SPB/SFX SASE1
2696	New structures to fight COVID-19 solved by liquid jet SFX at the European XFEL	T. Lane	SPB/SFX SASE1
2695	Time-resolved SFX of Covid-19 proteins including Mpro and PLpro	A. M. Orville	SPB/SFX SASE1
2671	Nanofocus Flash X-ray Imaging of Tick-Borne Encephalitis Virus Vaccine Particles	D. Osolodkin / A. M. Egorov	SPB/SFX SASE1
2510	Imaging proteins in solution via fluctuation X-ray scattering	P. H. Zwart	SPB/SFX SASE1
2676	Spatio-temporal imaging of multimode vibrational wave packets in small polyatomic molecules	A. Rudenko	SQS SASE3
2654	Element specific diffractive imaging of 3d metal core-shell nanoparticles	B. von Issendorff	SQS SASE3
2601	High-repetition rate 3D X-ray Imaging of Single Proteins	F. Maia	SQS SASE3
2591	Dynamics of Nanoplasma Expansion in Fibrous Nanoparticles	E. Rühl	SQS SASE3
2448	Coulomb explosion imaging of ultrafast ring-conversion reactions	R. Boll / A. Rudenko	SQS SASE3
2535	Time-resolved photoelectron diffraction imaging of fixed-in-space formamide molecules	T. Jahnke	SQS SASE3
2609	Ultrafast electronic structure dynamics as an evidence of a new carrier pairing mechanism in BaBiO3 based superconductors	A.P. Menushenkov	SCS SASE3
2593	Seeded Soft X-Ray Stimulated Emission in Copper	L. Mercadier	SCS SASE3
2497	Nonequilibrium Electron-Hole Dynamics of Highly Photoexcited Material	B. Cho	SCS SASE3