

**Scheduled experiments - Run 202102**

**July-November 2021**

<b>ID</b>	<b>New ID in this run</b>	<b>Title</b>	<b>Main Proposer / Principal Investigator</b>	<b>Instrument</b>
2383	2744	Intra- and intermolecular electronic and structural dynamics of solvated molecules by a combination of fs-XES and anisotropic fs-XRS	Bacellar Cases da Silveira / Chergui	FXE SASE1
2359	2742	Investigating the onset of photoinduced polaron formation in lead-free halide nanoparticles using femtosecond X-ray scattering and spectroscopy	Canton	FXE SASE1
2536		Mapping decoherence pathways following an ultrafast CDW phase transition	Boie / Johnson	FXE SASE1
2503		Out-of-equilibrium structural dynamics of the spin and charge density waves of chromium probed at the femtosecond time scale	Jacques	FXE SASE1
2189	2743	Single-shot visualization of the multi-centre ultrafast response in photoexcited spinel Co <sub>3</sub> O <sub>4</sub> by femtosecond non-resonant XES and diffraction	Mancini / Chergui	FXE SASE1
2821		Ultrafast structural dynamics driven by laser-induced demagnetization in presence of strong spin-phonon coupling	Sacchi / Vidal	FXE SASE1
2353	2738	A Spectroscopic Study of Solid-density HED Plasmas Isochorically Heated by Nano-focused FEL X-rays	Lee	HED SASE2
2452	2739	Hard X-ray imaging polarimeter	Schlenvoigt	HED SASE2
2592		Kinetics of structural phase transition in the dynamic-diamond anvil cell (dDAC): bridging static and shock compression	Jenei / Liermann	HED SASE2
2605		MHz diffraction and single shot heating experiments in the DAC, using pulsed IR laser or X-rays	Prescher / Morard	HED SASE2
2624		Spin states of FeS and (Mg,Fe)O at and beyond telluric core-mantle boundary conditions by simultaneous x-ray emission and x-ray diffraction	Sternemann / Konopkova	HED SASE2
2656		The transient response of solids under impulsive excitation	Wollenweber / Gregori	HED SASE2
2590		X-ray Heating of low-Z Materials at High Static Pressures	Husband / McMahon	HED SASE2
2899		Time-dependence of Dysprosium's magnetic and structural phase diagram upon application of a transient magnetic field	Kazarian / Madsen	MID SASE2
2487	2841	Investigation of the coherence of X-ray fluorescence	Chapman	MID SASE2
2490 / 2807		Cavitation Dynamics Studied by Time-Resolved High-Resolution X-Ray Holography: Optical Breakdown, Plasma Generation, Bubble Nucleation and Bubble-Wall Interaction / Cavitation Dynamics Studied by Time-Resolved High-Resolution X-ray Holography: Bubble Nucleation and Bubble Collapse	Hagemann / Salditt	MID SASE2

2655		Dynamics of oxygen-induced shape changes of supported Palladium nanoparticles	Chung / Stierle	MID SASE2
2263	2638	Observation of a traveling soliton lattice in sliding charge density wave systems	Le Bolloc'h	MID SASE2
2595		Fluctuation of the Polar Nanodomains in Lead Magnesium Niobate Relaxor Ferroelectric	Robinson	MID SASE2
2858		Time-resolved non-perturbative imaging of stochastically recurring dynamics	Büttner / Pfau	SCS SASE3
2784		Monitoring coupled electron and nuclear dynamics during a photoisomerization reaction in a transition metal complex	van Kuiken	SCS SASE3
2666	2780	Localized versus itinerant electron dynamics in 3D cobaltites	Ovchinnikov / Izquirdo	SCS SASE3
2609		Ultrafast electronic structure dynamics as an evidence of a new carrier pairing mechanism in BaBiO <sub>3</sub> based superconductors	Menushenkov	SCS SASE3
2593		Seeded Soft X-Ray Stimulated Emission in Copper	Mercadier	SCS SASE3
2497		Nonequilibrium Electron-Hole Dynamics of Highly Photoexcited Material	Cho	SCS SASE3
2510		Imaging proteins in solution via fluctuation X-ray scattering	Kurta / Zwart	SPB/SFX SASE1
2671		Nanofocus Flash X-ray Imaging of Tick-Borne Encephalitis Virus Vaccine Particles	Osolodkin / Egorov	SPB/SFX SASE1
2324		Time-resolved serial femtosecond crystallography studies of the mechanism of oxygen reduction by cytochrome c oxidase.	Neutze	SPB/SFX SASE1
2439	2746	Perovskite Quantum Dot Lattice Dynamics	Ayyer / Lange	SPB/SFX SASE1
2467	2745	The XFEL pulse-train structure enables time-resolved serial fs crystallography of the water splitting process in Photosystem II	Fromme	SPB/SFX SASE1
2760		Coulomb explosion imaging of trans-cis isomerization in molecular photoswitches	Amini	SQS SASE3
2676		Spatio-temporal imaging of multimode vibrational wave packets in small polyatomic molecules	Rudenko	SQS SASE3
2654		Element specific diffractive imaging of 3d metal core-shell nanoparticles	von Issendorff	SQS SASE3
2601		High-repetition rate 3D X-ray Imaging of Single Proteins	Maia	SQS SASE3
2591		Dynamics of Nanoplasma Expansion in Fibrous Nanoparticles	Rühl	SQS SASE3