Scheduled experiments - Run 202202

August - November 2022

ID	Title	Main Proposer / Principal Investigator	Instrument
3140	Energy and charge transfer in noble-metal free Fe(II)-Co(III) dyads for catalytic purposes	Prof. Dr. Matthias Bauer	FXE SASE1
3133	Probing the formation of iso-CHBr2-Br and its solvolysis reaction dynamics in the course of the photochemical reaction of CHBr3 in methanol and water using femtosecond X-ray solution scattering	PD Dr. Qingyu Kong	FXE SASE1
3086	Ultrafast structural dynamics driven by laser-induced demagnetization in presence of strong spin-phonon coupling	Dr. Maurizio Sacchi / Prof. Dr. Franck Vidal	FXE SASE1
3079	Structural and Electronic Dynamics in Coenzyme B12 and its Analogs	Prof. Dr. James E Penner-Hahn	FXE SASE1
2999	Uncovering the ultrafast lattice dynamics of polaron formation in epitaxial bismuth vanadate films for artificial photosynthesis	Prof. Dr. Felix Deschler	FXE SASE1
2983	Photoinduced intramolecular and solvation dynamics of an organic chromophore in polar solvent	Dr. Gianluca Levi / Prof. Dr. Martin Meedom Nielsen	FXE SASE1
2808	Optical control of biological photoisomerisation using TR-SFX	Prof. Dr. Jasper van Thor	FXE SASE1
3160	Thermal conductivity of insulators in deep planetary interiors	Dr. Ryan Stewart McWilliams / Prof. Dr. Carmen Sanchez-Valle	HED SASE2
3129	Probing the lateral transport of hot electrons in relativistic laser solid wire target interactions	Dr. Lingen Huang / Dr. Thomas Kluge	HED SASE2
3121	Measuring the electronic structure of isochorically heated Fe via Resonant Inelastic X-ray Scattering	Dr. Sam M. Vinko	HED SASE2
3082	Phase transition kinetics and surface morphology in femtosecond laser-heated metals	Dr. Motoaki Nakatsutsumi / Dr. Jan-Patrick Schwinkendorf	HED SASE2
3076	Kinetics of structural phase transitions in bismuth compressed in the dynamic-diamond anvil cell (dDAC)	Dr. Earl F. O'Bannon / Dr. Charles M Pépin	HED SASE2
3071	Investigation of “Phonon Hardening” in ultrafast optically-pumped gold using high-resolution inelastic X-ray scattering	Mr. Adrien Descamps / Dr. Emma E McBride	HED SASE2
3063	Melting and partial melting of iron and iron alloys under planetary cores conditions	Prof. Dr. Sébastien Merkel / Dr. Guillaume Morard	HED SASE2
3048	X-ray optical wave mixing for spatial reconstruction of nonlinear valence response	Christina Bömer / Prof. Dr. Nina Rohringer	HED SASE2
3196	Structural dynamics of Ru surfaces during photo induced reactions	Prof. Dr. Andreas Stierle	MID SASE2
3159	Detection of the ultranarrow nuclear resonance of 45-Sc	Prof. Dr. Ralf Roehlsberger / PD Dr. Yuri Shvyd'ko	MID SASE2
3118	Demonstrating improved performance of a rolling bunch pattern scheme in equilibrium XPCS	Dr. Johannes Moeller	MID SASE2

	measurements optimized for soft matter and biological samples		
3094	Probing Dynamics of Protein Cluster Formation with MHz-XPCS	Dr. Mariia Filianina / Prof. Dr. Foivos Perakis	MID SASE2
3052	Visualizing fundamental phonon-dislocation interactions in real-time to elucidate the microscopic origins of Strength	Dr. Kristoffer Haldrup / Prof. Dr. Leora E Dresselhaus-Marais	MID SASE2
3049	XPCS of strongly coupled nanocrystal superlattice precursors in electrolyte	Mr. Christian Tanner / Prof. Dr. Naomi S Ginsberg	MID SASE2
3025	Stochastic Domain Motions in a Charge Density Wave Material	Dr. Yue Cao	MID SASE2
3154	Enhancing soft x-ray diffraction from Cu atoms by inner-shell population differences	Dr. Andrei Benediktovitch / Prof. Dr. Nina Rohringer	SCS SASE3
3078	Simultaneously Track Collective Charge and Magnetic Excitations in Electron-Doped Cuprates using Time-Resolved RIXS	Dr. Wei-Sheng Lee	SCS SASE3
2976	Has excited-state geminal recombination been underestimated in the class of photo-reactive octahedral metal cyanides?	Dr. Vinicius Vaz da Cruz / Prof. Dr. Alexander Foehlisch	SCS SASE3
2956	Ultrafast relaxation dynamics of spin and orbital excitations in photoexcited 1D Heisenberg chain Sr2CuO3	Dr. Justine Schlappa	SCS SASE3
2953	Does Liquid Water Possess Two Structural Motifs under Ambient Conditions?	Dr. Zhong Yin	SCS SASE3
2995	Imaging a catalyst superlattice’s nucleation and growth	Dr. Kartik Ayyer	SPB/SFX SASE1
3046	Time-resolved WAXS of Bacteriophytochromes: Pushing the information limits of X-ray solution scattering	Prof. Dr. Filipe Maia	SPB/SFX SASE1
3051	Atomic resolution structure determination from a single XFEL pulse	Dr. Gyula Faigel	SPB/SFX SASE1
3083	Deciphering the Catalytic Mechanism of Human NQO1 by Time-Resolved Serial Femtosecond Crystallography with Minimized Sample Consumption at the EuXFEL	Prof. Dr. Alexandra Ros	SPB/SFX SASE1
3100	Megahertz Imaging the Implosion of Ultrasonic Bubbles and Their Effects on Exfoliation of 2D Functional Materials	Prof. Dr. Jiawei Mi	SPB/SFX SASE1
3111	Electron transfer in Photosystem I studied with time resolved fs serial crystallography enabled by the pulse train structure of the XFEL	Prof. Dr. Petra Fromme	SPB/SFX SASE1
3272	Femtosecond time-resolved structural studies of photoconversion in Cph1 and plant phytochromes (derived from 3064)	Prof. Dr. Jon Hughes / Prof. Dr. Karsten Heyne	SPB/SFX SASE1 (Protein Crystal Screening)
3099	Preliminary SFX for the structural elucidation of Covalent- and Metal-Organic Frameworks	Dr. Felipe Gándara / Prof. Dr. Victor A. de la Peña O'Shea	SPB/SFX SASE1 (Protein Crystal Screening)
3054	Alpha-synuclein fiber diffraction	Dr. Francesco Stellato / Prof. Dr. Silvia Morante	SPB/SFX SASE1 (Protein Crystal Screening)

3044	Screening of Cytochrome-c Nitrite Reductase (ccNIR) microcrystals	Prof. Dr. Marius Schmidt	SPB/SFX SASE1 (Protein Crystal Screening)
3018	Photoactivation intermediates of a bacterial adenylate cyclase	Dr. Sofia M Kapetanaki / Dr. Martin Weik	SPB/SFX SASE1 (Protein Crystal Screening)
3007	Towards time-resolved serial femtosecond crystallography of the recently discovered CarH photoreceptor	Dr. Martin Weik / Mr. Giorgio Schiro	SPB/SFX SASE1 (Protein Crystal Screening)
2967	Preliminary SFX experiments of the PBP2a: A medically relevant protein from methicillin-resistant Staphylococcus aureus	Dr. Jose Manuel Martin Garcia	SPB/SFX SASE1 (Protein Crystal Screening)
3122	Dynamics following resonant inner-shell excitations with intense x-ray pulses	Dr. Gilles Doumy	SQS SASE3
3014	Ultrafast photodynamics in nucleobases seen from the inside (derived from 2763)	Dr. Oksana Plekan	SQS SASE3
2979	Direct visualization of nuclear motion in thiophenone during and after ring opening	Dr. Rebecca Boll / Prof. Dr. Daniel Rolles	SQS SASE3
2954	RIXS at the Hidden Resonances of Highly Ionized Xenon: State-Resolved REXMI	Prof. Dr. Jan-Erik B. I. Rubensson / Dr. Marcus Agåker	SQS SASE3
3155	Coulomb Explosion Imaging of the ultrafast relaxation of thio-nucleobases	Prof. Dr. Markus Guehr	SQS SASE3