

14th Ringberg Workshop on Science with FELs

<u>Sunday, February 2nd, 2025</u>		
> 15:00	Coffee, biscuits, Garden room	
Chair: Marc Guetg		
16:20	Ilme Schlichting	Welcome
16:30	Jennifer Morgan	FEL radiation with spatially varying polarisation
17:00	Carlo Spezzani	New challenges for FERMI: Echo-Enabled Harmonic Generation to push the wavelength limit in seeded FELs
17:30	Jiawei Yan	Toward high-power attosecond-Angstrom X-ray free-electron lasers
18:00	Akihiko Ikeda	X-ray diffraction above 100 T
18:30	Dinner	
<u>Monday, February 3rd, 2025</u>		
	Chair: Camila Bacellar	
9:00	Thomas Elsaesser	Electric charge dynamics in liquids and proteins probed by ultrafast terahertz methods
9:30	Adi Natan	Unveiling Solvent-Dependent Solvation in Real Space and Time
10:00	Kyung Hwan Kim	Direct Observation of a Dynamic Transition in Bulk Supercooled H ₂ O and D ₂ O
10:30	Coffee break	
	Chair: Diling Zhou	
11:00	Teguh Citra Asmara	Ultrafast Dynamics of Charge Transfer across Strongly-Correlated Oxide Interfaces
11:30	Haoyuan Li	Demonstration of Hard X-ray Transient Grating with Sub-10 nm Period with an Application to High-Wavevector Phonon Excitation
12:00	Ian Gabalski	Resolving single-electron motion using ultrafast hard X-ray scattering
12:30 12:40	Group photo (depending on weather) Lunch	

Chair: Benjamin Erk		
14:00	Thomas Baumann	Femtosecond lifetime determination of electronic dipole transitions in Ne ⁸⁺ and Fe ¹⁶⁺
14:30	Uwe Bergmann	Going Forward – Advances in Stimulated X-ray emission at Angstrom Wavelengths
15:00	Oliviero Cannelli	Double-blind holography for single-shot SASE FEL reconstruction: challenges and promises
15:30	Coffee break	
Chair: Kirsten Schnorr		
16:00	Ichiro Inoue	Exploring hard X-ray nonlinear effects using attosecond pulses
16:30	Adrian Cavalieri	Table-top attosecond methodology at XFELs
17:00	Danilo Ferreira de Lima	Temporal diagnostics with QUACK
17:30	Jon Marangos	Attosecond impulsive x-ray Raman scattering
18:00	Tour of the castle	
18:45	Dinner	
	Chair: Daniela Rupp	
20:00	Marcus Dahlström	Control and detection of quantum entanglement mediated by time- dependent strong couplings from tailored FEL pulses
Tuesday, February 4 th , 2025		
Chair: Camila Bacellar		
9:00	John Gaida	Ultrafast transmission electron microscopy down to the cycle of light
9:30	Rebeca Gómez Castillo	Investigation on electronic structure and reactivity in heterometallic proteins
10:00	Martin Appleby	Investigating the excited state dynamics of Cu-based complexes for use as antibacterial photosensitisers via time-resolved optical and X-ray spectroscopies
10:30	Coffee break	

Chair: Philippe Wernet		
11:00	Hosung Ki	Tracking atomic positions using time-resolved X-ray liquidography: Challenges and future directions
11:30	Kelly Gaffney	Chemical applications of ultrafast RIXS
12:00	Kristjan Kunnus	Opportunities of time-resolved RIXS for chemical dynamics
12:30	<i>Lunch</i>	
14:00	<i>Discussion rounds / Hiking</i>	
18:30	<i>Conference Dinner</i>	
	Chair: Mark Hunter	
20:30	Thomas Barends	Fatty acid photodecarboxylase
<u>Wednesday, February 5th, 2025</u>		
Chair: Rebecca Boll		
9:00	Zuzana Konopkova	Science with Diamond Anvil Cells at EuXFEL and experimental observation of cubic iron above 200 GPa
9:30	Silvia Pandolfi	Imaging shock-compressed matter at XFEL facilities
10:00	Adrian Descamps	Probing extreme states of matter using high-resolution inelastic X-ray scattering
10:30	Flavio Capotondi	Broadband surface phonon spectroscopy by time-domain extreme ultraviolet diffuse scattering
11:00	End of meeting, lunch packages if desired	