

Science at FELs 2022 - 19-21 September 2022 - Draft programme

Monday, 19 September 2022

Tutorials	09:00	10:00	M. Altarelli (MPSD): tba
	10:00	11:00	L. Young (University of Chicago): Stimulated X-ray Raman Spectroscopy with SASE pulses
	11:00	11:30	<i>Coffee break</i>
	11:30	12:30	C. David (PSI): tba
	12:30	13:45	<i>Lunch break</i>
Welcome	13:45	14:00	Opening remarks
Session 1 AMO	14:00	14:30	D. Scuderi (CNRS): Tunable Free Electron Laser and IRMPD Spectroscopy: A perfect synergy to unravel the structure and reactivity of biomolecules in the gas phase
	14:30	15:00	A. Marinelli (SLAC): tba
	15:00	15:20	J. Bozek (EuXFEL): Unexpected resonances in the double core-hole photoionization of atoms and molecules
	15:20	15:40	M. Ilchen (DESY): Ultrafast Dynamics in Chiral Systems with Site-Specificity
	15:40	16:00	<i>Coffee Break</i>
Session 2 Chemistry	16:00	16:30	R. Ingle (University College London): Molecular Spectroscopy with Soft X-rays
	16:30	17:00	F. de Groot (Utrecht University): Time-resolved soft x-ray absorption and resonant inelastic x-rayscattering of transition metal oxides
	17:00	17:20	M. Scholz (DESY): The complete interface molecular movie: One-stop imaging of electronic and structural dynamics
	17:20	17:40	D. Bregenholt Jacobsen (EuXFEL): Resolving the ultrafast solute and solvent dynamics in the highly solvent sensitive [Fe(CN) ₄ (bpy)] ₂ - complex by simultaneous X-ray Solution Scattering and X-ray Emission Spectroscopy
	18:00		<i>Barbecue at DESY</i>

Tuesday, 20 September 2022

Session 3 Materials	10:00	10:30	B. Pfau (MBI): Ultrafast creation of a topological magnetic phase
	10:30	11:00	U. Staub (PSI): Coherent Driving of Spins and Atoms with THz Fields
	11:00	11:20	<i>Coffee break</i>
	11:20	11:40	W. Bronsch (Elettra): Ultrafast dynamics in (TaSe ₄) ₂ I triggered by valence and core-level excitation
	11:40	12:00	H.-Y. Chen (LSU, EPFL): Perturbated intersite Ir-Ir transition in honeycomb α-Li ₂ IrO ₃ upon ultrafast laser excitation
	12:00	13:30	<i>Lunch break</i>
Session 4 Biology	13:30	14:00	K. Ayyer (MPSD): tba
	14:00	14:30	G. Brändén (University of Gothenburg): XFEL- and synchrotron-based serial crystallography studies of the membrane-bound proton pump cytochrome c oxidase
	14:30	14:50	J. van Thor (Imperial College London): Coherent control of protein structural dynamics with X-ray crystallographic observation
	14:50	15:10	R. G. Castillo (LSU, EPFL): Investigation on electronic structure and reactivity in heterometallic proteins using femtosecond X-ray absorption spectroscopy
	15:30	16:30	<i>coffee break and transfer to EurXEL</i>
	16:30	18:30	Posters & Site visit
	18:30	20:30	<i>Reception</i>
	20:30		<i>Transfer to DESY</i>

Wednesday, 21 September 2022

Session 5 High-energy density	10:00	10:30	M. Harmand (UPMC): tba
	10:30	11:00	T. Cowan (HZDR): tba
	11:00	11:20	<i>Coffee break</i>
	11:20	11:40	R. Jin (CFEL, DESY): Plasma environmental effects in the atomic structure for simulating XFEL-heated solid-density matter
	11:40	12:00	E. Principi (Elettra): Recent advances in exploring matter under extreme conditions at the FERMI FEL
	12:00	13:30	<i>Lunch Break</i>
Session 6 New Methods	13:30	14:00	C. Svetina (PSI): X-ray transient grating at X-ray Free Electron Lasers: Status and perspectives
	14:00	14:30	J. Yamada (Spring8): Sub-10 nm XFEL focusing mirror system at SACLA for 10 ²² W/cm ² intensity
	14:30	14:50	M. Doyle (Lawrence Berkeley Lab): Seeded Two-Color Stimulated XES on Mn Solutions
	14:50	15:10	G. Goetzke (DESY): AI Methods for an improved evaluation of FEL diagnostic data
	15:10	15:30	<i>Break</i>
FELs of Europe	15:30	15:40	Celebration speech
	15:40	16:15	Historical talk
	16:15	16:50	Towards the future
	16:50	17:00	Prize ceremony
	17:00	18:00	Prize talk
	17:30		Closing remarks
	18:00	19:00	<i>Transfer to dinner location</i>
19:00		<i>Dinner</i>	