

## "Ultrafast dynamics of correlated electrons in solids"

<b>May 6<sup>th</sup></b>	
9:15 – 9:40	Olle Eriksson (Uppsala University) "General overview of the project"
9:40 – 10:20	Martin Eckstein (FAU Erlangen-Nürnberg) - "Revealing electron correlations under strong electric fields"
<b>Coffee break</b>	
10:40 – 11:20	Guy Cohen (Tel Aviv University) - "Transport and Counting Statistics with Inchworm Monte Carlo"
11:20 – 12:00	Hugo Strand (Chalmers University of Technology, Göteborg) "Mott insulators out-of-equilibrium"
<b>Lunch</b>	
14:00 – 14:40	Malte Rösner (Radboud University) - "Many Body Excitations in Layered Materials in and out of Equilibrium"
14:40 – 15:20	Andrey Bagrov (Uppsala University) - "Addressing non-equilibrium correlated systems with AdS/CMT holography"
15:20 – 16:00	Askar Iliasov (Radboud University) – "Towards nodal-antinodal dichotomy in high-Tc superconductors from the holographic perspective"
<b>Coffee break</b>	
16:20 – 17:00	Discussions
<b>May 7<sup>th</sup></b>	
14:00 – 14:10	Serguei Molodtsov (EuXFEL) "Introduction of XFEL"
14:10 – 14:50	Hermann Dürr (Uppsala University) "Tracking the non-equilibrium energy flow between electronic and lattice degrees of freedom in functional materials"
14:50 – 15:30	Andreas Scherz (EuXFEL) "Recent x-ray Spectroscopy and Coherent Scattering (SCS) studies of electron and spin dynamics in complex materials"
<b>Coffee break</b>	
16:00 – 16:40	Manuel Izquierdo (EuXFEL) "Theory enabled time-resolved spectroscopy of correlated oxides"
16:40 – 17:20	Dmitry Khakhulin (EuXFEL) "Ultrafast photochemistry and photophysics at FXE by femtosecond spectroscopy and scattering"
17:20 – 18:00	Ruslan Kurta (EuXFEL) "Correlated x-ray scattering studies of structure and dynamics of materials with an XFEL"
<b>May 8<sup>th</sup></b>	
9:00 – 9:40	Oscar Grånäs (Uppsala University) – "Towards a first-principles framework for materials out of equilibrium: Non-adiabatic dynamics with time-dependent density-functional theory"
9:40 – 10:20	Patrik Thunström (Uppsala University) – "Topology of SmB6 determined by DFT+DMFT"
<b>Coffee break</b>	
10:40 – 11:20	Evgeny Stepanov (Uni Hamburg) "Dynamical control of material properties in the high-frequency regime of the driving"
11:20 – 12:00	Matteo Vandelli (Uni Hamburg) "Dual Boson Diagrammatic Monte Carlo Approach to the Extended Hubbard model"
12:00 – 12:40	Ronny Knut (Uppsala University) "Ultrafast magnetization dynamics in transition metal alloys"
<b>Lunch</b>	
14:00 – 14:40	Erik van Loon (Bremen University) "Using ab-initio fluctuation diagnostics to understand charge-density waves"
14:40 – 15:20	Misha Titov (Radboud University) - "Anisotropy of interactions and universal magnetization dynamics in 2D Rashba magnets"
15:20 – 16:00	Beata Ziaja-Motyka (CFEL-DESY) - "Electronic, structural and magnetic transitions in X-ray irradiated solid materials"
16:00 – 17:00	Discussions