

2nd Workshop on Ultrafast Dynamics in Strongly Correlated Systems

10.10.2016 – 12.10.2016

Monday, October 10

08h00 – 09h00 Registration & Welcome Coffee	
08h50 – 09h00	Opening (U. Staub, PSI)
OSGA/EG06	Session 1 Strong field effects (Chair: Alexander Kemper, North Carolina State University)
09h00 – 09h40	Time-Domain Quantum Physics of Electrons (Alfred Leitenstorfer, University of Konstanz)
09h40 – 10h00	Ultrafast Structure Switching through Nonlinear Phononics (Dominik Juraschek, ETH Zurich)
10h00 – 10h20	Time-resolved XUV photoemission: a new clue for understanding the ultrafast dynamics in copper oxides (Federico Cilento, Elettra - Sincrotrone Trieste)
10h20 – 11h00	Coffee Break
OSGA/EG06	Session 2 Strongly correlated electrons (Chair: Philipp Werner, University of Fribourg)
11h00 – 11h40	Nonequilibrium Dynamics of Strongly Correlated Electron Systems (Masatoshi Imada, University of Tokyo)
11h40 – 12h00	Ultrafast evolution of the model Mott-Hubbard compound V₂O₃ (Gabriel Lantz, ETH Zurich)
12h00 – 12h20	Hund's exchange out of equilibrium (Hugo Strand, University of Fribourg)
12h20 14h00	Lunch (PSI restaurant OASE)
OSGA/EG06	Session 3 XFEL Science (Chair: Alfred Leitenstorfer, University of Konstanz)
14h00 -14h40	Correlation enhanced electron-phonon interaction in FeSe – Combined results from tr-XRD and tr-ARPES (Zhi-Xun Shen, Stanford University)
14h40 – 15h15	SwissFEL: New FEL Source for Hard and Soft X-rays (Rafael Abela, PSI)
15h15 – 15h35	Ultrafast demagnetization dynamics in TbMnO₃ (Elsa Abreu, ETH Zurich)
15h35 – 16h10	Coffee Break
OSGA/EG06	Session 4 Nonequilibrium dynamics/phase transitions (Chair: Markus Müller, PSI)
16h10 – 16h50	Electric breakdown near first order Mott transitions (Michele Fabrizio, SISSA)
16h50 – 17h10	Nonequilibrium electron dynamics: Formation of the quasiparticle peak (Sharareh Sayyad, Max Planck Institute for the Structure and Dynamics of Matter)
17h10 – 19h00 Poster session	

Tuesday, October 11

08h30 – 09h00 Welcome Coffee	
OSGA/EG06	Session 5 Systems with strong electron-phonon coupling (Chair: Michele Fabrizio, SISSA)
09h00 – 09h40	Understanding complex materials using non-equilibrium spectroscopy: What can theory tell us? (Alexander Kemper, North Carolina State University)
09h40 – 10h00	Nonlinear electron-phonon coupling in doped manganites (Vincent Esposito, PSI)
10h00 – 10h20	Nonequilibrium DMFT study of coherent dynamics in strongly coupled phonon-mediated superconductors (Yuta Murakami, University of Fribourg)
10h20 – 11h00	Coffee Break
OSGA/EG06	Session 6 Magnetization dynamics: spin-lattice phenomena (Chair: Urs Staub, PSI)
11h00 – 11h40	THz-driven Ultrafast Spin-Lattice Scattering In Metallic Ferromagnets (Stefano Bonetti, Stockholm University)
11h40 – 12h00	Ultrafast phonon-driven quenching of magnetic order (Sebastian Maehrlein, Fritz Haber Institute of the Max Planck Society)
12h00 – 12h20	The Ultrafast Einstein-de Haas Effect (Christian Dornes, ETH Zurich)
12h20 – 14h00	Lunch (PSI restaurant OASE)
OSGA/EG06	Session 7 Cooperative phenomena (Chair: Steven Johnson, ETH Zurich)
14h00 – 14h40	Transient correlated electron dynamics with multi degrees of freedom (Sumio Ishihara ,Tohoku University)
14h40 – 15h00	Disentangling Lattice and Magnetic Dynamics in Antiferromagnetic EuTe (Daniel Schick, Helmholtz-Zentrum Berlin)
15h00 – 15h20	Magnetic switching by spin-phonon coupling (Michael Fechner, ETH Zurich)
15h20 – 16h00	Coffee Break
OSGA/EG06	Session 8 Photodoping (Chair: Stefano Bonetti, Stockholm University)
16h00 – 16h20	Itinerant and localized magnetization dynamics in antiferromagnetic Ho (Laurenz Rettig, Fritz-Haber-Institut der MPG)
16h20 – 17h00	Probing the local charge and spin dynamics in correlated materials via the coupling with high-energy electronic excitations (Claudio Giannetti, Università Cattolica del Sacro Cuore)
17h00 – 17h20	Dynamics of screening: an EDMFT+GW perspective (Denis Golez, University of Fribourg)
18h00 – 21h00 Workshop Dinner @ Röstifarm Bözenegg	

Wednesday, October 12

08h30 – 09h00 Welcome Coffee	
OSGA/EG06	Session 9 CDW systems and band structure effects (Chair: Sumio Ishihara ,Tohoku University)
09h00 – 09h40	A multitude of hidden orders created in nonequilibrium transitions (Dragan Mihailovic, Josef Stefan Institute)
09h40 – 10h00	Coupling of electronic excitations to boson modes in complex materials analyzed by femtosecond tr-ARPES (Uwe Bovensiepen, University Duisburg-Essen)
10h00 – 10h20	Transient band gap enhancement in the excitonic insulator phase of Ta₂NiSe₅ upon photoexcitation (Claude Monney, University of Zurich)
10h20 – 11h00	Coffee Break
OSGA/EG06	Session 10 Magnetization dynamics (Chair: Martin Eckstein, University of Hamburg)
11h00 – 11h40	Manipulating magnetism by ultrafast control of the exchange interaction (Johan Mentink, Radboud University)
11h40 – 12h00	Ultrafast energy and momentum resolved dynamics of magnetic correlations in photo-doped Mott insulator Sr₂IrO₄ (Mark Dean, Brookhaven National Laboratory)
12h00 – 12h20	Ultrafast electronic, spin and lattice separation in LaCoO₃ (Manuel Izquierdo, European XFEL)
12h20 Workshop Closing	