

SATELLITE WORKSHOP - Photon Science

XFEL-Matter Interaction: Recent Advances in Theory



Thursday, 28 January 2016

Seminar Room I, Bldg. 99

The workshop aims at presenting recent advances in theoretical research on XFEL-matter interactions. Six invited experts will report on the research highlights covering a broad spectrum of scientific interests ranging from atomic and molecular physics through condensed matter to warm-dense-matter and plasma research. Future outlines of development will be discussed in connection with recent experimental achievements.

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PROGRAMME

	Session 1	Oriol Vendrell	DESY
14:00	Welcome address	Robin Santra	DESY
14:15	Response to Peak-Intensity X-ray Pulses, from Atoms to Complex Systems	Phay Ho	
14:45	Probing Femtosecond Nonadiabatic Molecular Dynamics using XFELs: Experimental achievements and Theoretical Challenges	Tom Penfold	
15:15	Towards dynamical x-ray imaging of ultrafast nanoplasma dynamics	Thomas Fennel	
15:45	Coffee break		
	Session 2	Sang-Kil Son	DESY
16:15	Ultrafast laser-induced magnetization dynamics in metals: perspectives of experiments and models involving XUV-excitation	Baerbel Rethfeld	
16:45	Nonequilibrium, nonthermal and nonadiabatic effects in FEL-excited semiconductors	Nikita Medvedev	
17:15	Tba	Dirk Gericke	
17:45	Closing Remarks	Beata Ziaja-Motyka	DESY

Update: 13 January 2016