Max-Planck-Institut für Struktur und Dynamik der Materie



Max Planck Institute for the Structure and Dynamics of Matter

Tuesday, August 18th 2015, 2 pm CFEL, Bldg. 99, Seminar Rooms I, II, III,

ROBERTO MERLIN

DEPARTMENT OF PHYSICS; UNIVERSITY OF MICHIGAN

PHOTON-MATTER INTERACTIONS III: ULTRAFAST SCIENCE

Time-domain studies of solids cover a broad range of phenomena and experimental approaches, from coherent spectroscopic probes of low-lying excitations to laserinduced phase transformations and non-equilibrium physics. This talk will provide an overview of the field, emphasizing the microscopic mechanisms of nonlinear light-matter interaction, and a brief description of selected recent breakthroughs from the literature. Attempts will also be made to identify emerging areas of research relevant to condensed matter systems that could benefit from ultrafast X-ray studies.

