



European XFEL Science Seminar

Tuesday, 17th September 2019, 13:00

Campus Schenefeld, XHQ, room E1.173 (coffee & biscuits will be served from 12:30)

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Non-equilibrium nanoscale control of charge, spin & lattice motion in magnetic materials

The idea to probe, change and control functional materials properties with the help of light has long intrigued researchers in materials science. I will show for several examples the unique potential of using femtosecond pulses from x-ray free electron lasers to probe in real time the ultrafast dynamics in nanoscale systems. Understanding and engineering the evolving electron, spin and lattice motion on the time- and lengthscales associated with the relevant magnetic interactions promises new ways for storing and processing of information.

Host: Robert Carley