

Schedule

Kick-Off Workshop

Monday 6 August

	09:00	Arrival and registration
	09:25	Welcome
Session 1		Atomic and nanoscale structure from coherent scattering, diffraction and imaging
	09:30	Prospects of imaging molecules with x-ray FELs - <i>H Chapman</i>
	10:00	Nano-small and femto-fast: looking into extremes at free electron lasers - <i>S Eisebitt</i>
	10:30	Controlled molecular imaging - <i>J Küpper</i>
	11:00	Chemical research with free electron laser radiation - <i>S Techert</i>
Social Event	11:45	Friederisiko (guided tour) and lunch
Official opening	15:00	Official opening of the Helmholtz Virtual Institute with greeting addresses
		Speaker of the Virtual Institute - <i>A Föhlisch</i>
		President of University of Potsdam - <i>O Günther</i>
		Scientific director of the HZB (core partner) - <i>A Kaysser-Pyzalla</i>
		Vice-president of TU Berlin (core partner) - <i>P U Thamsen</i>
		Vice-president of FU Berlin (core partner) - <i>B Schütt</i>
		Head of CFEL theory division (core partner) - <i>R Santra</i>
		Scientific director of XFEL (international partner) - <i>S Molodtsov</i>
Key note lecture	15:30	The scientific revolution enabled by x-ray free electron lasers - <i>J Stöhr</i>
	17:00	Welcome reception

Tuesday 7 August

Session 2		Quantum materials, magnetism and correlated solids
	09:00	Structure and dynamics of quantum matter: a view from real-, k- and q-space - <i>M Golden</i>
	09:30	Angle-resolved photoemission on correlated systems: From synchrotrons to x-ray free electron lasers - <i>S Molodtsov</i>
	10:00	Electronic spin correlation on the fs-timescale - <i>M Weinelt</i>
	10:30	Coffee break
	11:00	Optically excited states of low-dimensional materials probed with non-linear optics and angle-resolved photoemission - <i>U Bovensiepen</i>
	11:30	Emerging magnetic order far from equilibrium - <i>H Dürr</i>
	12:00	Structure and dynamics of domains of complex materials studied with medium-hard synchrotron light - <i>M Sprung</i>
	12:30	Ultrafast dynamics of amplitude and phase excitations in charge- and spin-ordered materials - <i>P Kirchmann</i>
	13:00	Lunch
Project session	14:00	Project talks P1 - P10 15 minutes each (closed session for partners of the VI) and poster presentation

Wednesday 8 August

Session 3		Molecular dynamics in physical chemistry and catalysis
	09:30	Ultrafast electron dynamics in solids and at surfaces - <i>W Wurth</i>
	10:00	Photoionization and fragmentation of water clusters by XUV light: Non-adiabatic pathways to Coulomb explosion - <i>O Vendrell</i>
	10:30	Coffee break
	11:00	Novel methods for studying time-resolved structural and electronic dynamics in molecules - <i>M Vrakking</i>
	11:30	Opportunities to probe water and aqueous solutions with FELs - <i>A Nilsson</i>
	12:00	Bond breaking and wave packet dynamics in molecules - <i>A Föhlisch</i>
	12:30	Lunch
	13:30	Workshop summary and project discussions

Summer school - Our toolbox

Thursday 9 August

	09:00	X-ray spectroscopy - from fundamentals to application - <i>A Nilsson</i>
	10:30	Coffee break
	11:00	X-ray spectroscopy - from fundamentals to application - <i>A Nilsson</i>
	12:30	Lunch
	13:30	Magnetic spectroscopy - <i>I Radu</i>
	15:00	Coffee break
	15:15	Magnetic scattering - <i>C Schüßler</i>
	16:45	Coffee break
	17:00	Dynamic aspects of x-ray spectroscopy - <i>A Föhlisch</i>

Friday 10 August

	09:00	X-ray spectroscopy of molecular dynamics - <i>P Wernet</i>
	10:30	Coffee break
	11:00	X-ray methods for ultrafast structural dynamics - <i>M Bargheer</i>
	12:30	Lunch
	13:30	Ultrafast laser science - from laser basics to applications - <i>M Weinelt</i>
	14:30	High harmonic generation - laser based VUV sources - <i>R Carley</i>