

Schedule IMPRS lectures “Ultrafast laser-matter interactions” (Feb 21-27, 2009 at TU Vienna, Austria)

Time / Date	Sa, 21.2.	So, 22.2.	Mo, 23 Feb	Tue, 24 Feb	We, 25 Feb	Do, 26 Feb	Fr, 27 Feb
9:00-10:30		Excursions (City tour etc.)	Brief overview of quantum theory (Burgdörfer)	Atomic structure and dynamical symmetry groups (Burgdörfer)	Wave packets, Rydberg physics (Burgdörfer)	Atomic scattering (Burgdörfer)	Attosecond atomic and molecular science (Kling)
10:30-11:00			Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
11:00-12:30			Molecular orbitals and chemical reactions (de Vivie-Riedle)	Electron correlation, methods of quantum chemistry and dynamics (de Vivie-Riedle)	Ultrafast proton transfer / nuclear wavepacket dynamics (Riedle)	Ultrafast electron transfer and solvation (Riedle)	Vibronic coupling and conical intersections (Domcke)
12:30-14:00			Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break
14:00-15:00			Discussion / Coffee Break	Discussion / Coffee Break	Discussion / Coffee Break	Discussion / Coffee Break	
15:00-16:30	Arrival		Methods of molecular spectroscopy and dynamics (Riedle)	Real time observation of molecular dynamics (Riedle)	Molecular group theory (Domcke)	Molecular vibrations (Domcke)	Departure