

New theory and methods in quantum research, UBC
February 25 - 27, 2012
Room 311, Brimacombe Building, 2355 East Mall, Vancouver, BC

Time	Saturday, February 25	Sunday, February 26	Monday, February 27
9:00 – 10:30	Topological Materials Andreas Schnyder (MPI-FKF) <i>Topological properties of unconventional superconductors</i> Marcel Franz (UBC) <i>Engineering a room-temperature topological phase in graphene via heavy adatom deposition</i>	Ultrafast <i>Andrea Cavalleri (MPI-CFEL)</i> <i>Light-induced non-equilibrium superconductivity outside the comfort zone</i> <i>Reinhard Kienberger (MPI-MPQ)</i> <i>Attosecond dynamics in atoms, molecules and solids</i> <i>Sarah Burke (UBC)</i> <i>Small and fast: investigating charge dynamics in nanoscale systems</i>	Oxides / Interfaces / Surfaces <i>Hao Tjeng (MPI-CPFS)</i> <i>Photoelectron spectroscopy on high oxidation state materials</i> <i>Maurits Haverkort (MPI-FKF)</i> <i>Theory of resonant x-ray spectroscopy</i> <i>Yan Pennec (UBC)</i> <i>Methods in Scanning Tunneling Microscopy for the study of novel quantum materials</i>
10:30 – 11:00	Coffee and discussions	Coffee and discussions	Coffee and discussions
11:00 – 12:30	Topological Materials <i>Julien Renard (UBC)</i> <i>Spin and adatoms on graphene</i> <i>Christian Ast (MPI-FKF)</i> <i>The electronic structure of surface alloys: from giant spin-splitting to Anderson localization</i>	Ultrafast <i>Claudio Giannetti (Università Cattolica Sacro Cuore)</i> <i>Understanding the complex dynamics of superconducting cuprates by broadband ultrafast spectroscopy</i> <i>David Jones (UBC)</i> <i>A new approach for high photon flux XUV sources using femtosecond enhancement cavities</i> <i>Eberhard Gross (MPI-MSP)</i> <i>Towards the ab-initio description of superconducting and other electronic correlations</i>	Kondo / Low Dimensional Problems <i>Peter Wahl (MPI-FKF)</i> <i>Symmetry breaking in Fe-Chalcogenide Superconductors</i> <i>Mona Berciu (UBC)</i> <i>The effect of the lattice structure on magnon-mediated interactions</i>
12:30 – 13:30	Lunch break	Lunch break	Lunch break
13:30 – 15:00	Kondo / Low Dimensional Problems <i>Steffen Wirth (MPI-CPFS)</i> <i>Quantum Phenomena in Heavy Fermion YbRh2Si2: Insight from Magnetotransport and STM</i> <i>Stefan Kirchner (MPI-PKS)</i> <i>Kondo Physics: Quantum critical heavy fermions to strongly correlated Quantum Dots</i>	Oxides / Interfaces / Surfaces <i>Matthias Scheffler (MPI-FHI)</i> <i>Accuracy of Ab Initio Computations in Materials Science -- Towards a Quantitative Assessment</i> <i>Andrea Damascelli (UBC)</i> <i>The electronic structure of complex systems by ARPES and in-situ doping</i> <i>Ilya Elfimov (UBC)</i> <i>Impurity & disorder effects with DFT</i>	Postdoctoral Talks <i>Sebastian Macke (MPI-UBC)</i> <i>X-ray Resonant Reflectivity study of Transition Metal Oxides. Supervisor: Vladimir Hinkov</i> <i>Alessandro Nicolaou (MPI-UBC)</i> <i>Angle and spin-resolved photoemission to probe interactions in complex layered oxydes: cobaltates and ruthenates. Supervisor: Andrea Damascelli</i> <i>Agustin Schiffrin (MPI-UBC)</i> <i>From atomically engineering solid interfaces to probing and controlling electron dynamics therein. Supervisor: Sarah Burke & Doug Bonn</i>
15:00 – 15:30	Coffee and discussions	Coffee and discussions	Coffee and discussions
15:30 – 17:00	Postdoctoral Talks <i>Victor Vakaryuk (Argonne National Lab)</i> <i>Chiral domains in Sr2RuO4: Reality or myth?</i> <i>Ludivine Chauviere (MPI-UBC)</i> <i>Interplay between spin-phonon-electron excitations in iron-pnictides</i> <i>Jesse Petersen (MPI-CFEL)</i> <i>Measuring Charge Density Wave Dynamics with Ultrafast ARPES</i>	Oxides / Interfaces / Surfaces <i>Mathieu Le Tacon (MPI-FKF)</i> <i>RIXS and REXS investigations of high Tc superconductors</i> <i>Gennady Logvenov (MPI-FKF)</i> <i>Digital synthesis of multicomponent oxides</i> <i>Vladimir Hinkov (UBC – MPI-FKF)</i> <i>Resonant x-ray reflectivity of correlated oxide heterostructures</i>	General discussion about the MPG-UBC Centre <i>Javed Iqbal (UBC)</i> <i>Director, Cooperative Education Science Co-op Programs</i> <i>General discussion</i>
17:00 – 18:00		Poster Session	
18:00 – 21:00	Reception Sage Bistro, 6331 Crescent Road		