

Monday, April 28, 2014

08:00	Registration	
08:45	Welcome	Jörg Schröder
	Switching and Tuning	
09:00	Horst Hahn, KIT <i>Reversible tuning of materials properties by external fields</i>	chair: Gerd Bacher
09:45	Rossitza Pentcheva, LMU München <i>Control of Metal-to-Insulator Transition in Low-dimensional Transition Metal Oxides: Insights from DFT+U calculations</i>	chair: Gerd Bacher
10:30	Coffee Break	
11:00	Akihito Sawa, AIST, Tsukuba <i>Interface Type Resistive Switching in Metal Oxides</i>	chair: Marika Schleberger
	Interfaces and Sintering	
11:45	Michael Moseler, U Freiburg <i>Coarse graining and localized plasticity between sliding nanocrystalline metals</i>	chair: Marika Schleberger
12:30	Lunch Break	
13:30	Labtours	
	Interfaces and Properties I	
15:30	Gregory Rohrer, Carnegie Mellon U <i>Grain Boundary Energies, Structural Transitions, and their Influence on Microstructure</i>	chair: Markus Winterer
16:15	Izabela Slufarska, U Wisconsin <i>Effects of grain refinement on friction and wear</i>	chair: Markus Winterer
17:00	Coffee Break	
17:30	Michael Farle, U Duisburg-Essen <i>Structure and Composition driven Functionality in magnetic Nanoparticles</i>	chair: Markus Winterer
18:15	Informal Dinner	

Tuesday, April 29, 2014

08:30	Registration	
	Phase Transitions and Self Organization	
09:00	Matthias Wuttig, RWTH Aachen <i>Control on the Nanoscale: Lessons to learn from Phase Change Materials</i>	chair: Heiko Wende
09:45	Winfried Petry, TU München <i>From Phonons to Functionality</i>	chair: Heiko Wende
10:30	Coffee Break	
11:00	Marcus Müller, U Göttingen <i>Directing the self-assembly of copolymer materials</i>	chair: Andreas Wucher
11:45	Oliver Schmidt, IFW Dresden <i>Elastic multifunctional nanomembranes: From concepts to applications</i>	chair: Andreas Wucher
12:30	Lunch Break	
13:30	Poster Session	
	Electromigration	
15:30	Dimitrios Maroudas, U Massachusetts Amherst <i>Current-driven Surface Morphological Stabilization and Surface Nanopatterning</i>	chair: Rolf Möller
16:15	Kirk Bevan, McGill U <i>The wind force and direct force in electromigration: a steady state perspective in the ballistic transport regime</i>	chair: Rolf Möller
17:00	Coffee Break	
17:30	Frank Meyer zu Heringdorf, U Duisburg-Essen <i>In-Situ Investigations of Electromigration in Crystalline Silver Wires with Defined Grain-Boundaries</i>	chair: Rolf Möller
18:15	Informal Dinner	

Wednesday, April 30, 2014

08:00	Registration	
	Interfaces and Properties II	
08:30	Karsten Albe, TU Darmstadt <i>Grain boundary mediated plasticity of nano-crystalline and nanoamorphous metals: Insights from atomistic computer simulations</i>	chair: Peter Kratzer
09:15	Gabi Schierning, U Duisburg-Essen <i>Interfaces in thermoelectric materials</i>	chair: Peter Kratzer
10:00	Coffee Break	
10:15	Ingo Steinbach, ICAMS, Bochum <i>The influence of vacancy- and particle drag on coarsening in nanocrystalline metals</i>	chair: Bernhard Eidel
11:00	Carl Krill, U Ulm <i>Hipsters versus Robber Barons: The Sociology of Grain Growth in a Nanostructured World</i>	chair: Bernhard Eidel
	Mechanical Properties and Self Healing	
11:45	Lunch Break	
12:30	Michel Barsoum, Drexel U <i>Strain accomodation in kinking nonlinear elastic solids</i>	chair: Alfons Fischer
13:45	Niels van Dijk, TU Delft <i>Self Healing of Structural Damage in Fe-based Alloys</i>	chair: Alfons Fischer
14:00	Coffee Break	
	Outlook	
14:15	Martin Müser, FZ Jülich <i>Modeling non-equilibrium dynamics at the nanoscale: Selected challenges and perspectives</i>	chair: Dietrich Wolf
15:00	Joachim Mayer, RWTH Aachen <i>Advanced TEM methods</i>	chair: Dietrich Wolf
15:45	Conclusion	Markus Winterer
17:00 – 22:00	Social Event and Conference Dinner	