



DFG Forschergruppe FOR 1650 - Dislocation based Plasticity

Kick-Off Workshop, 2 April 2012

KIT, Institute of Engineering Materials ITM
Seminar room, Bldg. 10.23, Kaiserstr. 10, Karlsruhe

Opening (Prof. Böhlke)

- 09.30 Numerical Implementation of a Three-dimensional Continuum Dislocation Microplasticity Theory (Stephan Wulfinghoff)
- 10.00 ρ and p_k Formulation of CDD (Ekkachai Thawinan)
- 10.30 Global Steps of Elasticity and CDD (Christian Wieners)
- 11.00 The Meaning of Boundary Conditions and Stress Components in CDD (Katrin Schulz)
- 11.30 Discrete Dislocation Dynamics: Current Status (Daniel Weygand)

Lunch break

- 13.30 Herstellung und Charakterisierung von Mikrobalkenstrukturen (Mark Wobrock)
- 14.00 Frank-Read sources in CDD: Emergence, Dislocation Evolution and Interaction (Stefan Sandfeld)
- 14.30 Finite Element Implementation of an Energetic Grain Boundary Hardening Approach into an Oligo-Crystalline Gradient Plasticity Model (Eric Bayerschen)
- 15.30 Stochastic Behavior in Dislocation Micro-Plasticity - Phenomenology and Modelling (Michael Zaiser)
- 16.00 Some Suggestions for Possible Cooperation in the Research Group (Bob Svendsen)
- 16.30 Internal FOR1650 Meeting