

Workshop

Micro-Macro-Interactions in Structured Media and Particle Systems

November 8-9, 2013 in the Hotel "Weißer Hirsch" in Wernigerode

Small travel guide

Meeting: Friday at 07:50 in the central hall of the central station Magdeburg
Journey: the train leaves central station at 08:10 from platform 5a
we have to change trains in Halberstadt
we'll arrive in Wernigerode at 09:17
Return Journey: the train leaves Wernigerode at 13:38
and arrives in Magdeburg Hbf at 14:44

Program

Friday

09:40 Welcome Coffee

10:00 Opening

Chair: D. Zöllner

- 10:05 N. Vorhauer Capillary film flow in 2D SiO₂ pore networks - influence on phase distributions and drying rates
10:25 K. Held Iterative solution of a coupled bulk-surface convection-diffusion problem
10:45 Y. Sun Pore-scale simulation and experiment of liquid imbibition in etched-glass micromodel
11:00 V. Ssemaganda The Riemann problem for a model of disperse vapor bubbles in a liquid

11:20 Short Break

Chair: V. Ssemaganda

- 11:35 A. Kutschke 9%-12% chromium steels micro structural observations and modeling consequences
11:50 D. Zöllner Grain boundary migration in polycrystalline graphene
12:10 A. Maimaiti Simulation of polycrystalline material at creep conditions
12:30 J.C. Reiher Introduction

12:40 Lunch

13:40 Excursions through the City

Chair: K. Held

16:00 Board Meeting & Presentation of Posters (2-3 minutes each)

- S. Dodla Finite element simulations of lamellae Cu-Ag composites
R. Gröpler Numerical simulation of lime calcination in normal shaft kilns
M. Hussain Modeling effect of process parameters on spray fluidized bed aggregation kinetics

M. Ievdokymov	tba
K. Kavaliou	Relaxation of mesh assumptions for P^1 discretization of the Convective-Diffusive problem with Neumann boundary conditions
K. Mader-Arndt	Direct measurement and model-based back-calculation of micromechanical material properties of glass particles
O. Olatunji	Stability determination of surface modified Al_2O_3 and TiO_2 suspensions
O. Ozhoga-Maslovskaja	Creep damage evolution under non-proportional loading
P. Penumakala	Thermomechanical simulation of continuous casting in mold
O. Prygorniev	Statistical research of polycrystalline model
E. Tohidlou	Hardening parameters identification for a Nickel single crystal with crystal plasticity

16:30 Poster session with coffee and cake

18:45 Meeting for Dinner → 19:00 Dinner @ Brauhaus

Saturday

Chair: O. Olatunji

08:30	I. Lvov	Micro-macro analysis of creep behaviour in a multipass weld
08:45	A. Girchenko	Modeling of micro- and nanostructures made of films and crystals/fibers arrays
09:05	M. Dadkhah	Morphological characterization of agglomerates produced in a spray fluidized bed by X-ray tomography
09:20	R. Pashminehazar	Microstructure of particles produced by fluidized bed agglomeration of soft materials
09:30	G.S. Sandaka	Decomposition behavior of lumpy limestones from different Origins
09:50	J. Köppel	Introduction

10:00 Coffee Break

Chair: S. Roy

10:50	P.G. Thiem	Plasma sprayed iron aluminide coatings on aluminum alloy Substrates
11:05	P. Dragomirov	Mikro-Makro-Spraycharakterisierung alternativer Dieselkraftstoffe
11:15	M. Weber	Material plasticity
11:35	S. Roy	A microscale modelling approach to deformation twinning – limitations and potentials
11:55	J. Kalisch	Non-negative approximations of the crystallographic texture and the convergence of solutions
12:15	H. Chowdhury	Introduction
12:25	Closing Remarks	
12:30	Lunch	