

Micro-Macro-Interactions in Structured Media and Particle Systems

Workshop Quedlinburg 7th and 8th of November 2014

Best Western Plus Hotel Schloßmühle, Kaiser Otto Straße 28, 06484 Quedlinburg, Tel.: +49 (0) 39 46 787 0

Travel guide on Friday

- meeting at **7:00** on **platform 5a**
- train starts at **7:10** at train station Magdeburg, **platform 5a** (HEX80134)
- train arrives at Quedlinburg **8:23**
- 20 minutes walk to our hotel (appendix 1)

Program

Friday

08:55 Opening

S1 Chair: Martin Weber

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|-------|----------|------------------|---|
| 09:00 | Reihaneh | Pashminehazar | Microstructure characterization of maltodextrin agglomerates by X-ray microtomography |
| 09:20 | Alireza | Attari Moghaddam | Using PN for computation of parameters in one-equation continuum drying model |
| 09:40 | Nicole | Vorhauer | 2D Ring Model for Drying: Comparison with Continuous Film Model and Experiments |
| 10:00 | Olakunle | Olatunji | Application of Particle Sedimentation Analysis in Electrostatically Stabilized TiO ₂ Suspension Stability Assessment |

10:20 Coffee break

S2 Chair: Alireza Attari Moghaddam

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|-------|---------|----------|---|
| 10:40 | Martin | Weber | Material Plasticity |
| 11:00 | Jan | Kalisch | Crystallographic Texture – Approximation and Evolution in Terms of Harmonic Tensors |
| 11:20 | Srihari | Dodla | Experimental identification and numerical simulations of lamellar Cu-Ag composites |
| 11:50 | Sara | Bucci | New Student: From past interests to future research |
| 12:00 | Andreas | Kutschke | An inelastic material model for advanced chromium steels |

12:30 Lunch

14:00 City tour including the city center and castle-hill (2 german groups, 1 english group, all starting at our hotel)

S3 Chair: Kristin Simon Presentation of Posters (2-3 minutes each)

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|-------|----------------|------------|--|
| 16:00 | Helal | Chowdhury | Crystal plasticity modeling of two phase alloys |
| | Plamen | Dragomirov | Analysis of the combustion and atomisation behaviour of alternative diesel fuels according to their micro- and macroscopic characteristics |
| | Julia | Köppl | The Influence of microstructure on the Fracture Toughness of Mo-Si-B-alloys |
| | Adili | Maimaiti | Simulation of polycrystall at creep condition at elevated temperature |
| | Pavan | Penumakala | Stress evolution in electromagnetic casting of aluminum |
| | Oleksandr | Prygorniev | Statistical analysis of stress and deformation state in polycrystalline aggregates with large number of grains |
| | Jörg Christian | Reiher | A mechanical framework for 2nd strain-gradient-materials |
| | Florian | Schulz | Fuel Wall Film investigation using Laser-Induced-Fluorescence |
| | Zinaida | Todorova | Production and characterization of glass – TiO ₂ /SiO ₂ core-shell particles |
| | Esmaeil | Tohidlou | Effect of the hardening models on the grain refinement during the ECAP process |

16:30 Poster session with coffee and cake

17:30 Board Meeting

18:45 Meeting in our hotel lobby, walk to Brauhaus Lüdde (19:00, appendix 2)

Saturday

S4 Chair: Adili Maimaiti

08:30	Amir	Eshghinejadfard	Flow simulations using a lattice Boltzmann method
08:50	Abbas	Kamranian Marnani	Cohesive Powder Beds
09:10	Mykola	levdokymov	Identification Technique of Constitutive Models for Cast Irons under Thermo-Mechanical Loads
09:30	Johanna	Eisenträger	New Student: A finite element for the calculation of laminated glasses and photovoltaic panels
09:40	Oliver	Junge	New Student: Identification of parameters for advanced material models
09:50	Resam	Makvandi	New Student: Introduction

10:00 Coffee break

S5 Chair: Florian Schulz

10:20	Philipp	Thiem	Thermal Sprayed Iron Aluminide Coatings under thermal and mechanical loading
10:40	Kristin	Simon	Stabilization of surface convection-diffusion-reaction equations
11:00	Klim	Kavaliou	Numerical simulation of a magnetic fluid seal
11:20	Robin	Gröpler	Numerical method for solving stiff boundary value problems in lime shaft kilns
11:40	Gouri Sankar	Sandaka	Calcination behaviour of lumpy limestones from different origins

12:00 Closing remarks

12:15 Lunch

Travel guide on Saturday

- train starts 13:33 at train station Quedlinburg, platform 2 (HEX80149)
- train arrives at Magdeburg 14:44

Appendix 1



Appendix 2

