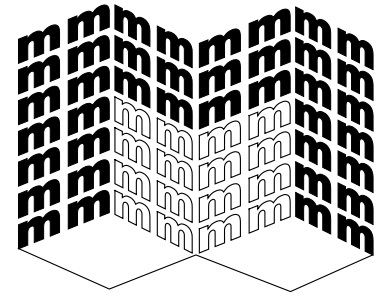

Micro-Macro-Interactions

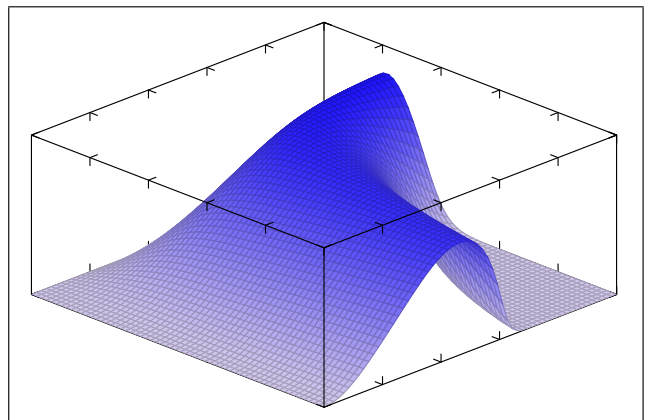
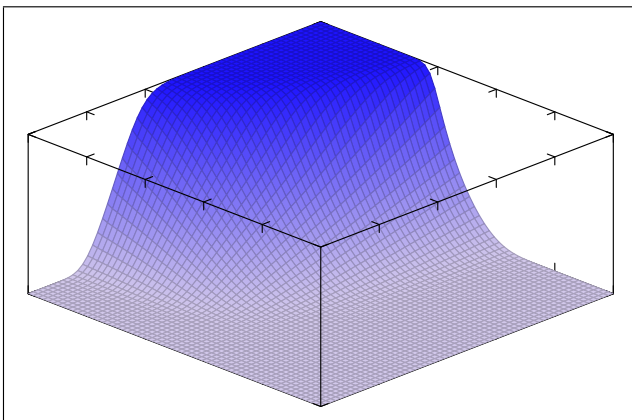
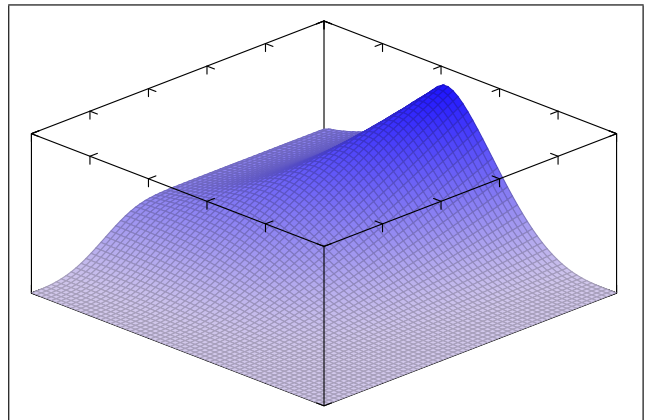
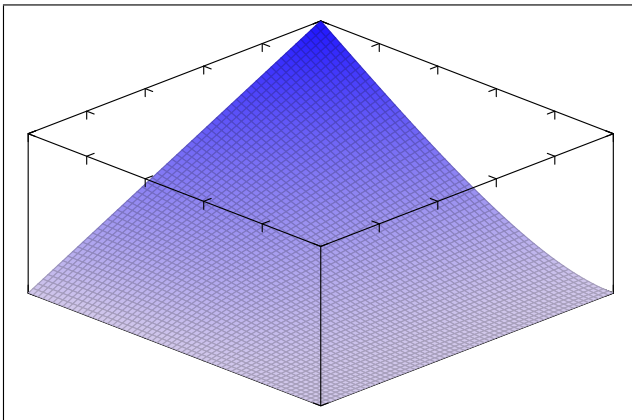
of Structured Media and Particle Systems



Programme

Blankenburg

Winter Workshop 2018



Preface

The research training group 1554 is located at the Otto von Guericke University, Magdeburg (OvGU) and is financed by the German Research Foundation (DFG). The members are PhD students, post-docs, and professors from the faculties of mechanical engineering, process and systems engineering, mathematics and natural sciences. Their working areas cover topics from different engineering branches, applied mathematics as well as theoretical and computational physics.

In order to promote scientific exchange and discussions, workshops take place twice a year. These semi-annual workshops are traditionally organized by the PhD students themselves.

This document contains all necessary information for the Winter Workshop 2018 of the DFG research training group *Micro-Macro-Interactions of Structured Media and Particle Systems*, which will take place at the hotel *Schlosshotel* in *Blankenburg* from October 18th to 19th, 2018.

Magdeburg, October 10th, 2018

Sebastian Dieck & Joachim Nordmann

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1 Location and Travel Guide

1.1 Hotel

Schlosshotel Blankenburg
Schnappelberg 5
38889 Blankenburg (Harz)

+49 (0) 3944-36190
service@schlosshotel-blankenburg.de
www.schlosshotel-blankenburg.de

1.2 Journey by train

Eventually it is necessary to use "Schienenersatzverkehr" from Halberstadt to Blankenburg on the first day and from Blankenburg to Halberstadt on the second day.

1.2.1 Journey at 18th of October to Blankenburg

- we meet at 08:55 at train station Magdeburg Hbf on platform 9
- train HEX 11 starts at 09:08 on platform 9
- we arrive at 10:41 on platform 1 in Blankenburg
- short walk to the hotel (1 km / 15 min)

1.2.2 Journey at 19th of October back to Magdeburg

- walk to train station Blankenburg
- train HEX 31 starts at 13:20 from platform 1
- we arrive at 13:57 on platform 1a in Halberstadt
- go to platform 1 and take train HEX 11 to Magdeburg Hbf
- train HEX 11 starts at 14:01
- we arrive at 14:44 on platform 9 in Magdeburg Hbf

2 Timetable

2.1 Thursday

11:10	Opening		
S1			Chair: Sebastian Dieck
11:15	Resam	Makvandi	A Phase-Field Fracture Model based on Gradient Elasticity
11:35	Joachim	Nordmann	A Cohesive Zone Model with Damage Gradient Extension for Delamination Analysis of Coatings at High-Temperature
11:55	Jannik	Voges	An approach for cracking in thermo-oxidative aged polymers
12:15	Lunch		
S2			Chair: Resam Makvandi
13:15	Zhengkun	Liu	Phase-field modelling of anisotropic fracture in solar-grade polycrystalline Silicon
13:35	Christoph	Matern	Recent Results for Two-Phase Flows - The ADER Approach
13:55	Seyed Ali	Hosseini	Lattice Kinetic Scheme: Enhanced collision operator for the lattice Boltzmann model
14:15	Coffee Break		
S3			Chair: Christoph Matern
14:35	Sebastian	Dieck	SD effect in martensitic stainless steel under Q&P heat treatment condition
14:55	Julia	Becker	The Influence of V on the mechanical properties of Mo-Si-B alloys
15:15	Board Meeting		
17:00	City Tour		
19:00	Dinner at LA LUNA		

2.2 Friday

09:05	Opening		
S4	Presentation of Posters (max. 3min each)		Chair: Julia Becker
	Yuan	Fang	Heat transfer analysis during quenching a high-temperature surface with nozzle fields
	Ahu	Öncü	Grain growth in ultrafine-grained thin films: A 3D problem
	Omid	Kazemi	Improving the phase field simulation of Mo-Si-B alloy solidification; microstructure and sequence of reactions evaluation
	Sebastian	Hütter	Genetic Algorithm for Parameter Optimization Over Highly Non-Linear Multidimensional Spaces
	Hazem	Yaghi	Riemann problem for a diffuse interface model
09:25	Poster Session and Coffee Break		
S5			Chair: Joachim Nordmann
10:25	Nicole	Vorhauer	Neutron radiography of the lyophilization of frozen sugar solutions
10:45	Abhinandan Kumar	Singh	Monte Carlo model to simulate the spray fluidized bed agglomeration
11:05	Xiang	Lu	Dependency of continuum model parameters on the spatially correlated pore structure studied by pore-network drying simulations
11:25	Lunch		
12:35	Departure		

Please adhere to your specified presentation time, i.e. 15 minutes of speaking time for presentations and maximum 3 minutes of speaking time for posters. Talks exceeding this limit will be canceled by the chairman or chairwoman, respectively.

3 Social Programme

After finishing the workshop on Thursday we will go for a city tour through Blankenburg. The tour will start at 17:00 in front of our hotel. You can choose between two tours. One is in English and the other in German. During this tour we will get a little impression of Blankenburg and learn something about the history of this town.

4 Dinner

After the city tour we go to the restaurant LA LUNA where our dinner takes place at 18:30, approximately. Please remember which dish you have chosen.

The address is:

La Luna

Katharinenstraße 17

38889 Blankenburg (Harz)

+49 (0) 3944-361983

<http://de.restaurant-laluna.de/dtp.dvc/pg/speisenkarte/index.htm>

Please check the website of the research training group for updated versions of the programme:
www.grk1554.ovgu.de

5 List of Participants

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