



Final Symposium

Research Training Group 615

Interaction of Modeling, Computation
Methods and Software Concepts for
Scientific-Technological Problems

30th & 31st October 2009

Appelstraße 11
1st floor

Final Program

Research Training Group 615

Final Symposium



Friday, 30th October 2009

9.30 - 10.00	Get Together	
10.00 - 10.30	Welcome Speech	Professor Klaus Hulek, Professor Ernst P. Stephan, Professor Peter Wriggers
10.30 - 11.10	Advances in the Particle Finite Element Method in Computational Mechanics	Professor Eugenio Oñate
11.10 - 11.50	The LATIN Method: a Paradigm for Multiscale and Multiphysics Computational Methods	Professor Pierre Ladeveze
11.50 - 12.20	Coffee Break	
12.20 - 13.00	Finite Element Computation of Microcrack Initiation and Propagation Inside Cortical Bone Tissue - A Multi Scale Approach	Dieter Kardas
	Experimental and Numerical Analysis of Damage Evolution in Polymer Composite Coatings Bonded to Sheet Metal	Ilya Peshekhodov
13.00 - 14.00	Lunch	
14.00 - 14.30	A life within the GRK 615	Josefine Freitag
14.30 - 15.10	New Trends in High Dimensional Approximation	Professor Alexey Chernov
15.10 - 15.50	Aspects on Adaptive Two-Scale FE-Analysis Including Homogenization	Professor Kenneth Runesson
15.50 - 17.00	Poster Session & Coffee Break	
17.00 - 18.20	Analysis of a Nonsmooth Adhesion Problem with Hemivariational Inequalities and Finite Elements	Leo Neemann
	Finite Element and Boundary Element Coupling for Fluid-Structure Interaction Problem	Catalina Dominguez
	The Blow-Up Mechanism of Moving Boundary Problems	Friedrich Lippoth
	Well-Posedness and Stability Results for Non-necrotic Tumor Growth	Anca-Voichita Matic
18.20 - 19.00	Break	
19.00 - 21.00	Dinner	

Research Training Group 615

Final Symposium



Saturday, 31st October 2009

9.00 - 10.20	Lubricated Contact with Rough Surfaces	Michael Budt
	Numerical Simulation of Aluminium in a Semi-Solid State	Thorsten Matthias
	Numerical Modelling of Non-Linear Electromechanical Coupling of an AFM with Finite Element Method	Josefine Freitag
	Basics of Fuzzy Interpolations	Wassim Abu Abed
10.20 - 10.50	Coffee Break	
10.50 - 11.50	Multiscale Analysis of Nanoindentation by Quasi-continuum Method	Wenzhe Shan
	Flow Formulation for Hot Forging	Philipp Blanke
	Distance Computation on Surfaces	Hannes Thielhelm
11.50 - 12.30	Bogovskii and Poincaré Integral Operators: A New Tool in Vector Analysis	Professor Martin Costabel
12.30 - 12.40	Closing	Professor Ernst P. Stephan
12.40 - 14.00	Lunch	