

REG2012

Conference Program

Wednesday June 13

8:00 - 9:10	Registration of participants	
9:10 - 9:30	Welcome	
chairman:	Vořechovský	
9:30 - 10:30	M. Beer <i>Lecture on imprecise probability</i>	
10:30 - 11:00	Coffee break	
chairman:	Viertl	
11:00 - 11:20	F. Fedele, R.L. Muhanna <i>Interval Solution for Inverse Problems under uncertainty</i>	pp. 139-150
11:20 - 11:40	M. Mahsuli, T. Haukaas <i>Sensitivity Measures for Minimizing Model Uncertainty in Probabilistic Analysis</i>	pp. 299-314
11:40 - 12:00	S. Freitag, R.L. Muhanna, W. Graf <i>A Particle Swarm Optimization Approach for Training Artificial Neural Networks with Uncertain Data</i>	pp. 151-170
12:00 - 12:20	R.L. Muhanna, R.L. Mullen, M.V. Rama Rao <i>Nonlinear Interval Finite Elements for Structural Mechanics Problems</i>	pp. 367-387
12:20 - 12:40	I. Skalna, M.V. Rama Rao, A. Pownuk <i>Dynamic Response of Beams to Interval Load</i>	pp. 497-512
12:40 - 14:00	Lunch	
chairman:	Muhanna	
14:00 - 14:20	D. Novák, R. Pukl <i>Reliable/reliability computing for concrete structures: Methodology and software tools</i>	pp. 427-438
14:20 - 14:40	D. Lehký, Z. Keršner, D. Novák <i>Determination of statistical material parameters of concrete using fracture test and inverse analysis based on FraMePID-3PB tool</i>	pp. 261-270
14:40 - 15:00	B. Teplý, P. Rovnaníková, P. Rovnaník, D. Vořechovská <i>Probabilistic modelling of concrete structures degradation</i>	pp. 559-566
15:00 - 15:20	A. Strauss, H.-A. Demissie <i>Gamma Process – Life cycle analysis of the Neumarkt Bridge, IT</i>	pp. 535-546
15:20 - 15:40	M. Sýkora, M. Holický <i>Durability Assessment of Large Surfaces Using Standard Reliability Methods</i>	pp. 547-558
15:40 - 16:00	Coffee break	
chairman:	Mullen	
16:00 - 16:20	J. Králík <i>A RSM Method for Nonlinear Probabilistic Analysis of the NPP Reinforced Concrete Structures</i>	pp. 219-240
16:20 - 16:40	T. Poutanen <i>Simultaneous loads in structural design</i>	pp. 449-456
16:40 - 17:00	M. Krejsa <i>Application of the Direct Optimized Probabilistic Calculation</i>	pp. 241-260
17:00 - 17:20	J. Eliáš, M. Vořechovský <i>On the effect of material spatial randomness in lattice simulation of concrete fracture</i>	pp. 125-138
17:45 - 19:00	City tour	
19:00 - 21:30	Dinner - "Stopkova Plzeňská Pivnice" pub	

7:30 - 8:30	Breakfast	
chairman:	Novák	
8:30 - 9:20	Keynote lecture - R. Viertl Reliable Computing and Fuzzy Information	
9:20 - 9:40	T. Most <i>Variance-based sensitivity analysis in the presence of correlated input variables</i>	pp. 335-352
9:40 - 10:00	W. Verhaeghe, W. Desmet, D. Vandepitte, I. Elishakoff, D. Moens <i>Bounding the dependence measures for spatial uncertainties</i>	pp. 599-612
10:00 - 10:20	P. Cacciola <i>Simulation of high variable random processes through the spectral- representation-based approach</i>	pp. 79-94
10:20 - 10:40	H. Zhang, M. Beer <i>Interval quasi-Monte Carlo method for reliability assessment with imprecise probability</i>	pp. 613-632
10:40 - 11:00	Coffee break	
chairman:	Beer	
11:00 - 11:50	Keynote lecture - M.G. Stewart, J. Mueller Terror, Security, and Money: Balancing the Risks, Benefits, and Costs of Critical Infrastructure Protection	pp. 513-534
11:50 - 12:10	M. Jirásek, S. Dobruský <i>Accuracy of Concrete Creep Predictions Based on Extrapolation of Short-Time Data</i>	pp. 197-208
12:10 - 12:30	R. Čajka, P. Matečková, L. Mynarzová, M. Stará <i>Analysis of Tri-axial Stress-strain Conditions of Pre-stressed Masonry Corner</i>	pp. 95-102
12:30 - 12:50	T. Most, J. Will <i>Robust Design Optimization in industrial virtual product development</i>	pp. 353-366
12:50 - 13:10	E. Auer, S. Kiel, A. Rau <i>Verified Parameter Identification for Solid Oxide Fuel Cells</i>	pp. 41-56
13:10 - 13:30	M. Modares, J. Bergerson <i>Reliable Dynamic Analysis of Structures Using Imprecise Probability</i>	pp. 315-324
13:30 - 14:30	Lunch	
15:00	Departure to chateau Valtice	
		
	Conference dinner in Valtice Chateau	
21:30 - 22:30	Transportation to Brno	

7:30 - 8:30	Breakfast	
chairman:	Stewart	
8:30 - 8:50	G. Muscolino, R. Santoro, A. Sofi <i>Frequency response functions of discretized structural systems with uncertain parameters</i>	pp. 407-426
8:50 - 9:10	S. Ratschan <i>An Algorithm for Formal Safety Verification of Complex Heterogeneous Systems</i>	pp. 457-468
9:10 - 9:30	M. Hladík, M. Černý <i>On the Tolerance Approach to Possibilistic Nonlinear Regression over Interval Data</i>	pp. 183-196
9:30 - 9:50	A. Serafinska, W. Graf, M. Kaliske <i>A Multi-objective Optimization Approach with a View to Robustness Improvement</i>	pp. 483-498
9:50 - 10:10	T. Muromaki, K. Hanahara, Y. Tada, S. Kuroda, T. Fukui <i>Estimating load condition having caused structure failure and an optimal design taking account of the</i>	pp. 387-406
10:10 - 10:30	J. Podroužek <i>Importance sampling strategy for oscillatory stochastic processes</i>	pp. 439-448
10:30 - 11:00	Coffee break	
chairman:	Most	
11:00 - 11:20	R. Ryppl, R. Chudoba, M. Vořechovský <i>Stochastic cracking of brittle matrix composites with heterogeneous reinforcement</i>	pp. 469-482
11:20 - 11:40	M.-Y. Liu, Y.-J. Li <i>Reliability Analysis of High-Rise Buildings under Wind Loads</i>	pp. 271-284
11:40 - 12:00	D. Boumezerane, S. Belkacemi <i>Random Sets-based estimation of soundings density for geotechnical site investigation</i>	pp. 57-66
12:00 - 12:20	R. Čajka <i>Different models of soil-structure interaction and consequent reliability of foundation structure</i>	pp. 103-110
12:20 - 12:30	Closing ceremony	
12:30 - 14:00	Lunch	