

# 5<sup>th</sup> ANNUAL CONFERENCE OF IT4INNOVATIONS

IT4Innovations  
national  
supercomputing  
center

## Time

November 7<sup>th</sup>, 2016  
9:00 – 18:00

## Venue

IT4Innovations building  
3<sup>rd</sup> floor atrium

## PROGRAMME

9:00	9:15	Registration	
9:15	9:30	IT4Innovations in 2016	Martin PALKOVIČ
9:30	9:45	IT4I's Infrastructure	Branislav JANSÍK
9:45	10:00	Research Programme Summary <a href="#">IT for Disaster and Traffic Management</a>	Jan MARTINOVIČ
10:00	10:15	Research Programme Summary <a href="#">Numerical Modelling for Engineering</a>	Radim BLAHETA
10:15	10:30	Research Programme Summary <a href="#">HPC Libraries and Supercomputing for Industry</a>	Tomáš KOZUBEK
10:30	11:00	Coffee Break	
11:00	11:15	Research Programme Summary <a href="#">Modelling for Nanotechnologies</a>	Jaromír PIŠTORA
11:15	11:30	Research Programme Summary <a href="#">IT for Knowledge Management</a>	Václav SNÁŠEL
11:30	11:45	Research Programme Summary <a href="#">Soft Computing Methods with Supercomputer Applications</a>	Vilém NOVÁK
11:45	12:00	Research Programme Summary <a href="#">Multimedia Information Recognition and Presentation</a>	František GRÉZL
12:00	12:15	Research Programme Summary <a href="#">Secure and Safe Architectures, Networks and Protocols</a>	Martin DRAHANSKÝ

12:15 13:30 Break for Lunch

13:30	14:00	Model-based Treatment Planning for Cancer Therapy Using High-intensity Focused Ultrasound	Jiří JAROŠ
14:00	14:20	Solving Quadratic Programming Problems Using PERMON	David HORÁK
14:20	14:40	Computing Betweenness Centrality and Combination with Flood Prediction	Robert SKOPAL
14:40	15:00	Task Scheduling on HPC Infrastructure	Stanislav BŮHM
15:00	15:30	Coffee Break	
15:30	16:00	ExaScale PaRallel FETI SOLver	Lubomír ŘÍHA
16:00	16:20	Magneto-optical Spectroscopy at the Soft X-ray Range	Dominik LEGUT
16:20	16:40	Linguistic Characterization of Natural Data by Applying Intermediate Quantifiers on Fuzzy Association Rules	Petra MURINOVÁ
16:40	17:00	Using an Adaptive and Time Predictable Runtime System for Power-Aware HPC-oriented Applications	Martin GOLASOWSKI
17:00	18:00	Poster Session & Snack	

Posters:

Automatization of Inventory Control Process	Tomáš MARTINOVÍČ
Spectral Domain Decomposition Using Local Fourier Basis: Application to Ultrasound Simulation on a Cluster of GPUs	Jiří JAROŠ
MOLDIMED - Platform for Massive Parallel Sequencing Data Analysis	Václav SVATOŇ
Modest but Effective System for Satellite-based Identification of Land Processes	Milan LAZECKÝ
How to Detect and Analyze Atherosclerotic Plaques in B-MODE Ultrasound Images: A Pilot Study of Reproducibility of Computer Analysis	Jiří BLAHUTA
Constitutive solution scheme for Mohr-Coulomb plasticity in 3D	Stanislav SYSALA

WiFi connection

Network: tuonet-guest

Username: IT4I-vk

Password: qVyL

