



Sponsor:



Final program

Monday	24.10.2011	13:00 – 13:30	Registration
		13:30 – 14:00	Opening session
		14:00 – 14:45	Invited lecture
		14:45 – 15:30	Invited lecture
		15:30 – 16:00	Coffee break
		16:00 – 16:45	Invited lecture
		16:45 – 17:30	Invited lecture
		17:30 – 18:30	Panel discussion
		18:30	Reception
Tuesday	25.10.2011	9:00 – 9:40	Invited lecture
		9:40 – 10:20	Session 1
		10:20 – 10:35	Coffee break
		10:35 – 12:15	Session 2
		12:15 – 13:00	Lunch
		13:00 – 13:40	Invited lecture
		13:40 – 15:20	Session 3
		15:20 – 15:35	Coffee break
		15:35 – 17:15	Session 4
		17:15 – 18:15	Session 5
Wednesday	26.10.2011	9:00 – 10:20	Special session Crisis 1
		10:20 – 10:35	Coffee break
		10:35 – 11:55	Special session Crisis 2
		11:55 – 12:40	Lunch
		12:40 – 13:40	Tutorial on Cloud computing
		13:40 – 13:55	Coffee break
		13:55 – 15:15	Special session Recler 1
		15:15 – 16:15	Special session Recler 2
		16:15 – 16:30	Consortium "SlovakGrid"
		16:30 – 17:00	Program committee meeting
		17:00	Closing ceremony

Monday October 24, 2011

13:30

Opening ceremony

Ladislav Hluchý

14:00

Invited lecture

eInfrastructure in the Czech Republic

Luděk Matyska

14:45

Invited lecture

Activities and visions in the Italian grid infrastructure

Mirco Mazzucato

16:00

Invited lecture

GPGPU Applications in Theoretical Chemistry

Stanislav Biskupič

16:45

Invited lecture

An overview of the Finnish model for provisioning of services for scientific computing and its extending to pan-European e-infrastructures

Per Öster

17:30

Panel discussion

Basic theme: *Infrastructure for HPC in Slovakia*

Chair person: *Ladislav Hluchý*

Tuesday October 25, 2011

9:00

Invited lecture

Polish research infrastructure and its relation to e-Infrastructure

Norbert Meyer

9:40

Session 1

Bio-applications

Chair person: Ladislav Hluchý

Molecular modeling of structure, folding and interactions of biomolecules in the era of GPU computing

S. Hayryan, M.-C. Wu, C.-K. Hu, Z. Gažová and T. Kožár

MedDecSup an Intelligent Distributed Medical Decision Support System

Adrian Gligor, Barna Iantovics

10:35

Session 2

Distributed Computing and Large Scale Applications

Chair person: Tibor Kožár

A Technique to Create Efficient Fortran Programs for Heterogeneous Parallel Platforms

Anatoliy Doroshenko, Kostiantyn Zhreb, Iurii Tyrchak, and Viet Tran

On the performance of vector calculations on CPU and GPU

Karol Grondžák, Penka Martincová, and Ondrej Šuch

Analyzing Performance of Parallel Algorithms for Linear System Equations

Peter Hanuliak and Martin Hudik

Remarks on GPU usage in cryptanalysis

Matúš Jókay, Milan Plančík, and Pavol Zajac

GPU accelerated parallel genetic algorithms

Andrej Kozák, Ivan Hujsi, and Jozef Rodina

13:00

Invited lecture

Intelligent Computations for Complex Problem Solving

Barna Iantovics

13:40

Session 3

Business benefits and challenges of grid in Financial Markets

Chair person: Barna Iantovics

Identification of financial contagion outbreaks through distributed systems

Bradut Vasile Bolos and Adrian Gligor

Endogenous and Exogenous benefits of grid in Financial Markets

Calin-Adrian Comes

Financial Analysis Computing Architecture in Distributed Environment

Marian Zvada, Marek Domiter, Vladimir Motoska, Lukas Slebodnik, and Tomas Kasanicky

Recent literature and directions in non-parametric methods for assessing bank performance through efficiency analysis of decision making units

Anca Munteanu

Implication of macroeconomic volatility in operating with real options theory

Daniel Stefan

15:35

Session 4

High Performance Distributed Computing and Large Scale Simulations

Chair person: Ján Glasa

Augmented reality application in parallel computing system

Branislav Sobota, František Hrozek, Martin Varga, Csaba Szabó, Štefan Korečko, and Peter Ivančák

An agent-based security approach for Intrusion Detection Systems

Bogdan Crainicu, Barna Iantovics

Matrix Multiply on the 32/64-bit Computer Architecture for Simulation on the HPC

Igor Kvasnica, Peter Kvasnica

Simulation of Uranus and Neptune formation using the new Asu-SAV computer cluster
Luboš Neslušan, Marian Jakubík

Acceleration coefficients impact of the Particle Swarm Optimization algorithm in solving of the scheduling problem using MATLAB Distributed Computing Server
Ján Zelenka

17:15

Session 5

Research Infrastructures

Chair person: Michal Laclavík

Parallel Computing in EGI

Viera Sipkova, Miroslav Dobrucky, and Peter Slizik

Facility of VOCE for IDW Interpolation in GIS

Vladimír Siládi and Ladislav Huraj

A Genetic Algorithm for the Multiple Depot Periodic Vehicle Routing Problem

Peter Kurdel, Jolana Sebestyénová

Wednesday October 26, 2011

9:00

Special session Crisis 1

Crisis situations predictions and solutions

Chair person: Ladislav Halada

Computer Simulation of Forest Fires on Complex Terrain

Jan Glasa, Peter Weisenpacher, and Ladislav Halada

Techniques of Parallel Data Mining for Numerical Values Prediction

Peter Krammer and Ladislav Hluchy

Object-oriented approach for developing cloud abstraction layer

Binh Minh Nguyen, Viet Tran, Ladislav Hluchy

Optimalizácia výkonu klastra podľa aktuálnych potrieb gridu

Miroslav Dobrucký

10:35

Special session Crisis 2

Crisis situations predictions and solutions

Chair person: Robert Andok

HMM speech synthesizer in Slovak

Sakhia Darjaa, Marian Trnka, Miloš Cerňak, Milan Rusko, and Róbert Sabo

Tool for Creating 3D Slovak Speech Visemes

Eva Pajorová

Voxel-based Rendering of E-Beam Lithography Processes

Peter Slížik, Robert Andok, Pavol Nemeč, Anna Benčurová, Viera Jablonská, Adrian Ritomský, and Ladislav Hluchý

Computer fire simulations by FDS and the influence of a domain decomposition strategy to simulation outcome

P. Weisenpacher, L. Halada, J. Glasa

12:40

Tutorial on Cloud Computing

Lecturer: Viet D. Tran

13:55

Special session Recler 1

Querying large data sets using design patterns

Chair person: Martin Šeleng

Using secure agent infrastructure for management of network routers

Branislav Šimo, Zoltán Balogh, Emil Gatial, Ladislav Hluchý

Using High Performance Data Streaming for Integration and Mining of Environmental Data

Ondrej Habala

Using Parallelization for Simulations of Human Behaviour

Štefan Dlugolinský, Marcel Kvassay, Ladislav Hluchý, Michał Wrzeszcz, Dariusz Król, and Jacek Kitowski

Enron Emails as Graph Data Corpus for Large-scale Graph Querying Experimentation

Michal Laclavik, Martin Seleng, Marek Ciglan, and Ladislav Hluchý

15:15

Special session Recler 2

Querying large data sets using design patterns

Chair person: Zoltán Balogh

Testovanie Štandardov prístupnosti aplikácií určených pre verejnú správu

Matej Lučenič, Peter Bílik, Michal Ohrablo, Martin Vozár, Eugen Jeckel

Testovanie použiteľnosti webových aplikácií

Matej Lučenič, Peter Bílik, Michal Ohrablo, Martin Vozár, Eugen Jeckel

Distributed crawling and semantic search in BBC news

Martin Šeleng, Štefan Dlugolinský

Presentation equipment

Each talk has a time slot of 20 minutes. Please speak for 15 minutes and leave 5 minutes for questions.

In conference room there will be a Personal Computer available for presentations, with Microsoft Power Point and Adobe Acrobat Reader installed.

You can load your presentation into the PC via

- USB MEMORY KEY
- CD

Please contact your session chair a few minutes before the start of the session with short **biography** written, if not done previously via our conference system.

In case you need to use your personal laptop, please contact your session chair before the session starts.