



Sponsors:



Final program

Monday	8.11.2010	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 & Press conference
		16:00 – 16:45	Invited lecture
		16:45 – 17:30	Invited lecture
		17:30 – 18:00	Vendor session
		18:00 – 18:30	Panel discussion
		18:30	Reception
Tuesday	9.11.2010	9:00 – 9:40	Invited lecture
		9:40 – 11:00	Session 1
		11:00 – 11:15	Coffee break
		11:15 – 12:35	Session 2
		12:35 – 13:30	Lunch
		13:30 – 14:00	Invited lecture
		14:00 – 15:00	Session 3
		15:00 – 15:15	Coffee break
		15:15 – 15:55	Session 4
		15:55 – 17:15	Session 5
Wednesday	10.11.2010	9:00 – 9:40	Invited lecture
		9:40 – 10:20	Session 6
		10:20 – 10:35	Coffee break
		10:35 – 11:55	Session 7
		11:55 – 12:30	Consortium "SlovakGrid"
		12:30 – 13:00	Program committee meeting
		13:00	Closing ceremony
Wednesday	10.11.2010	13:30 – 15:30	Course on Development of Grid Applications

Monday November 8, 2010

13:30

Opening ceremony

Ladislav Hluchý

14:00

Invited lecture

Structure and Recent Advancements of National Grid Infrastructure in Poland

Jacek Kitowski

14:45

Invited lecture

Extending Service Grids with Desktop Grids

Peter Kacsuk

16:00

Invited lecture

The Swedish Computing Infrastructure

Erwin Laure

16:45

Invited lecture

D-Grid Infrastructure

Stefan Freitag

17:30

Vendor session

IBM a oblasť vysoko výkonného počítania - Partner so skúsenosťami, na ktorých sa oplatí stavať

Marián Kováčik

18:00

Panel discussion

Chair person: Ladislav Hluchý

Tuesday November 9, 2010

9:00

Invited lecture

GPU for Bio-inspired Computing

Václav Snášel

9:40

Session 1

Distributed Computing and Large Scale Applications

Chair person: Ladislav Hluchý

GPU Performance within Numerical Precision of OpenCL Operations

Martin Jurečko, Jana Kočíšová, Ján Buša Jr., Tomáš Kasanický, Marek Domiter, and Marián Zvada

On the Load Balancing of Parallel Maximum Clique Algorithm

Karol Grondžák and Penka Martincová

Remarks on the GRID Computation of the Characteristics of Boolean Matrices

Matúš Jókay

GPU Computing on CUDA Cluster

Tibor Kožár

11:15

Session 2

Environmental Applications and Distributed Computing

Chair person: Anatoliy Doroshenko

Experimental and Computational Study of Automobile Fires

Peter Weisenpacher, Ladislav Halada, Ján Glasa, Pavel Poledňák, Gabriel Okša

Data Mining for Prediction in Meteorology and Hydrology

Peter Krammer, Ondrej Habala, Martin Šeleng, Viet Tran, and Ladislav Hluchý

Experiments with a Hybrid-Parallel Model of Weather Research and Forecasting (WRF) System

Viera Šipková, Andrej Lúčny, and Martin Gažák

The grid scheduling

Jarmila Škrinárová

13:30

Invited lecture

Slovak participation in the World LHC Computing Grid

Branislav Sitár

14:00

Session 3

Use of Knowledge and Semantics in Distributed Computing

Chair person: Penka Martincová

New Aspects on Sentiment Analysis of Slovak Texts

Ivana Budinská, Andrej Kadora

Evaluating Grid Infrastructure for Natural Language Processing

Radovan Garabík, Jan Jona Javoršek, and Tomáš Erjavec

Objectives for Migration and Operation of Legacy Applications in the Cloud

Zoltán Balogh, Emil Gatiaľ, Ladislav Hluchý

15:15

Session 4

Astronomy & Astrophysics and High Energy Physics

Chair person: Ladislav Halada

The Formation of Ice Giants in the Solar Nebula with Jupiter and Saturn

Marian Jakubík, Luboš Neslušan, and Ján Astaloš

Dynamics of Streams of Chosen Comets

Dušan Tomko, Luboš Neslušan, and Marián Jakubík

15:55

Session 5

Grid and Service-oriented Computing

Chair person: Zoltán Balogh

Performance Analysis of Cloud Middleware

Binh Minh Nguyen, Viet D. Tran

The technology of information security in grid computing systems

Aleksandr Palagin, Nadir Alishov, Aleksandr Gromovski, Sergei Zinchenko, Vitaliy Marchenko, Aleksandr Mischenko

Advanced Configuration with DIANE

Viet Dinh Tran

Running Parallel MATLAB on EGEE Grid

Peter Kurdel, Jolana Sebestyénová

Wednesday November 10, 2010

9:00

Invited lecture

Designing Efficient Programs for Parallel Heterogeneous Platforms Using Rewriting Rules Technique

Anatoliy Doroshenko, Kostiantyn Zhereb, and Mykola Kotyuk

9:40

Session 6

Computational Chemistry & Material Science

Chair person: Ján Glasa

Distributed Way of Biomolecular Conformational Space Exploration -

Experience of grid-CICADA Tool Utilization

Petr Kulhanek, Jakub Stepan, Zdenek Kriz, Jan Kmunicek, Ludek Matyska, and Jaroslav Koca

The Use of NAMD Cluster Computing in Molecular Dynamics Study of Inhibition Mechanism for Aldose Reductase

Magdaléna Májeková, Miroslav Dobrucký, and Peter Slížik

10:35

Session 7

Distributed Computing and Large Scale Simulations

Chair person: Ivana Budinská

Mathematical Model of Multicriteria Scheduling in Grid Environment as a Tool to Determine Efficiency of Scheduling Algorithms: Improved Strong Pareto Evolutionary Algorithm (SPEA2)

Michal Ulbricht and Michal Murín

Application Multi-Model in Simulation of Mathematical Models

Igor Kvasnica and Viera Šipková

Benefits in Workload Virtualization and Information Virtualization for Simulation in Grid
Igor Kvasnica, Peter Kvasnica

Rendering a Large Set of Graphical Data in Cluster Environment
František Hrozek, Branislav Sobota, Csaba Szabó, and Štefan Korečko

13:30

Course on Development of Grid Applications

Lecturers: Miroslav Dobrucký, Viera Šipková, Viet D. Tran

Programme schedule:

- Introduction to EGI (European Grid Initiative) (20 min / *Dobrucký*)
- Principles of cluster and grid computing (15 min / *Šipková*)
- Development of grid applications (30 min / *Šipková*)
- Overview of high-level grid tools (20 min / *Tran*)
- Introduction to cloud computing (20 min / *Tran*)

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.