

2nd International Workshop on Grid Computing for Complex Problems  
**GCCP'2006**  
Bratislava, Slovak Republic  
November 27-29, 2006

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## Program

Monday	27.11.2006	13:00 – 13:30	Registration
		13:30 – 13:40	Opening session
		13:40 – 14:20	Invited lecture
		14:20 – 16:20	Charon - Lecture with hands-on
		16:20 – 16:40	Coffee break
		16:40 – 17:40	Session 1
		17:40 – 19:00	Session 2
Tuesday	28.11.2006	9:00 – 9:20	Invited lecture
		9:20 – 11:00	Session 3
		11:00 – 11:20	Coffee break
		11:20 – 13:20	Session 4
		13:20 – 14:00	Lunch
		14:00 – 15:40	Course for system administrators
		15:40 – 16:00	Coffee break
		16:00 – 16:30	Tutorial and demo
		16:30 – 16:50	Panel / Round table
		16:50 – 17:20	Consortium "Slovak grid"
		17:20 – 17:40	Program committee meeting
		18:00	Reception
Wednesday	29.11.2006	9:00 – 9:40	Invited lecture
		9:40 – 11:00	Session 5
		11:00 – 11:20	Coffee break
		11:20 – 12:40	Session 6
		12:40	Closing ceremony

## Monday November 27, 2006

**13:30**

*Opening ceremony*

*Ladislav Hluchý*

**13:40**

*Invited lecture*

A Generic Grid Environment for Central Europe: A Study of Rotaxanes Behavior

*Jan Kmuníček, Daniel Kouřil, Petr Kulhánek, and Martin Petřek*

**14:20**

**Charon - Lecture with hands-on** (Prednáška o systéme Charon) *in Czech language*

Utilizing E-Science through Charon Extension Layer Toolkit

*Lecturers of the hands-on: Jan Kmuníček, Martin Petřek*

**16:40**

**Session 1**

**Track 1**

**Grid and Cluster Computing**

**Chair person: Ladislav Hluchý**

A conception of parallel graphic architecture for large graphical data volume visualization in grid architecture environment

*Branislav Sobota and Marek Straka*

Statistical response to the point defect of magnetic dot array simulated on a grid platform

*Pavel Baláž, Denis Horváth, and Martin Gmitra*

The model of the current stellar perturbations on the Oort Cloud

*Luboš Neslušan, G. Leto, M. Jakubík, and T. Paulech*

**17:40**

**Session 2**

**Track 2**

**Use of Knowledge and Semantics in Grid and Cluster Computing**

**Chair person: Jan Kmuníček**

Knowledge-based Approach to Service Performance Estimation for Grid Workflows

*Zoltán Balogh, Ladislav Hluchý*

K-Wf Grid Portal - A portal for semantic workflows

*Emil Gatial and Martin Šeleng*

Workflow and Knowledge Support for Flood Forecasting

*Ondrej Habala, Martin Mališka, Michal Laclavík, Marián Babík, Emil Gatial, Ladislav Hluchý*

Semantic Analysis of Grid Workflows

*Martin Šeleng, Michal Laclavík, Zoltán Balogh, and Ladislav Hluchý*

**Tuesday November 28, 2006**

**9:00**

*Invited lecture*

High Performance Methods for Regional Weather Forecasting

*Anatoliy Doroshenko, Vitaliy Prusov and Yuriy Tyrchak*

**9:20**

*Session 3*

*Track 3*

*High Performance Distributed Computing and Large Scale Simulations*

**Chair person: Anatoliy Doroshenko**

Simulation of avalanche dynamics in a computational grid

*Jozef Černák, Alexander Dirner*

Clusters, grids, molecules: why virtual screening should forego real HTS

*Tibor Kožár*

Modelling Speed of the Aircraft at the Computer System of the Simulator

*Peter Kvasnica, Tomáš Páleník*

Mobile Networks System Level Simulations with Grid Computing

*Pavol Lunter, Karol Slanina*

Parallel Grid Implementation for Laplacean Equation Computation by Gauss-Seidel Method

*Peter Varša*

**11:20**

*Session 4*

*Track 1*

*Grid and Cluster Computing*

**Chair person: Tibor Kožár**

IEPSAS-Kosice: Experiences and advances

*M. Babík, D. Bruncko, T. Darányi, L. Hluchý, L. Sandor, P. Striženec, and F. Tomasz*

Parallel implementation of Ant Colony Optimization algorithms

*Štefan Baboš, Ivan Hanuliak*

Grid Computing in Computational Chemistry

*Stanislav Biskupič, Martin Breza, and Radovan Herchel*

Distributed Solving of Combinatorial Problems

*Karol Grondžák, Penka Martincová, Štefan Baboš, and Matúš Chochlík*

Support for object-oriented parallel programs for grids and clusters  
*Matúš Chochlík*

Digital Market for Non-dedicated Cluster  
*Michal Košťál and Pavel Tvrdlík*

**14:00**

*Course for administrators of EGEE Grid sites*

*in Slovak*

Kurz pre administrátorov uzlov EGEE Gridu  
*Lecturers: Ján Astaloš, Marian Babík, Tomáš Darányi*

**16:00**

*Tutorial and demo*

gLite Lightweight Middleware for Grid Computing  
*Lecturers: Viera Šipková and Viet D. Tran*

**Wednesday November 29, 2006**

**9:00**

*Invited lecture*

To modelling of distributed parallel algorithms  
*Ivan Hanuliak, Juraj Hanuliak, and Peter Hanuliak*

**9:40**

*Session 5*

*Track 1*

*Grid and Cluster Computing*

**Chair person: Ivan Hanuliak**

Mediagrid infrastructure - services and portal  
*Marek Ciglan, Martin Mališka, and Branislav Šimo*

Interactive application support - Int.eu.grid project  
*Miroslav Dobrucký, Ján Astaloš, Ladislav Hluchý, Viera Šipková, and Viet D. Tran*

Earth Science going into the Grid - DEGREE project

*Miroslav Dobrucký and Ladislav Hluchý*

Numerical study on a solid bar with and without plastic heating – Further way to improve our energy conservation equation

*Ladislav Écsi*

**11:20**

***Session 6***

***Track 1***

***Grid and Cluster Computing***

**Chair person: Ladislav Écsi**

Effective Distributed Query Processing on the Grid

*Penka Martincová, Karol Grondžák*

Technické riešenie výpočtových prostriedkov pre kláštrové počítanie na báze PC komponentov

*Lubomír Obžera*

About Knowledge Management and Distributed Computing in Grid Infrastructure

*Peter Kurdel and Jolana Sebestyénová*

Overview of The Grid Authorization

*Michal Zimen and Ladislav Hudec*

## **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.