

4th International Workshop on Grid Computing for Complex Problems
GCCP 2008
 Bratislava, Slovak Republic
 October 27-29, 2008

Program:

| | | | |
|-----------|------------|---------------|---------------------------------------|
| Monday | 27.10.2008 | 13:00 – 13:30 | Registration |
| | | 13:30 – 14:00 | Opening session |
| | | 14:00 – 15:00 | Invited lecture 1 |
| | | 15:00 – 16:00 | Invited lecture 2 |
| | | 16:00 – 16:15 | Coffee break |
| | | 16:15 – 17:15 | Invited lecture 3 |
| | | 17:15 – 17:30 | Presentation Hewlett-Packard Slovakia |
| | | 17:30 – 18:00 | Invited lecture 4 |
| | | 18:00 | Reception |
| Tuesday | 28.10.2008 | 9:00 – 9:40 | Invited lecture 5 |
| | | 9:40 – 11:00 | Session 1 |
| | | 11:00 – 11:15 | Coffee break |
| | | 11:15 – 12:35 | Session 2 |
| | | 12:35 – 13:35 | Lunch |
| | | 13:35 – 14:15 | Invited lecture 6 |
| | | 14:15 – 15:15 | Session 3 |
| | | 15:15 – 15:30 | Coffee break |
| | | 15:30 – 16:30 | Session 4 |
| | | 16:30 – 18:00 | Tutorial: "P-GRADE" |
| Wednesday | 29.10.2008 | 9:00 – 9:40 | Invited lecture 7 |
| | | 9:40 – 11:00 | Session 5 |
| | | 11:00 – 11:15 | Coffee break |
| | | 11:15 – 11:30 | Panel / Round table |
| | | 11:30 – 11:45 | Consortium "SlovakGrid" |
| | | 11:45 – 12:00 | Program committee meeting |
| | | 12:00 | Closing ceremony |
| Wednesday | 29.10.2008 | 11:15 – 13:00 | Grid Tutorials |
| | | 13:00 – 13:30 | Lunch |
| | | 13:30 – 16:00 | Grid Tutorials |

Monday October 27, 2008

13:30

Opening ceremony

Ladislav Hluchý

14:00

Invited lecture

EGI: Building of a Future Pan-European Grid Infrastructure

Dieter Kranzlmüller

15:00

Invited lecture

The DEISA European Supercomputing Ecosystem

Wolfgang Gentzsch

16:15

Invited lecture

Grid Empowered Molecular and Material Science Simulations

Antonio Lagana

17:15

Presentation

Hardware Platform Designed for GRID Computing Applications and High Performance Computing Environments

Ján Ostrochovský

17:30

Invited lecture

Grid computing for Earth Sciences

Monique Petitdidier

Tuesday October 28, 2007

9:00

Invited lecture

Grid Technologies for Earth Observation Applications

Nataliia Kussul, Ladislav Hluchý, Paul Kopp, Evgeny Lupian, Andrii Shelestov, Sergii Skakun, Oleksii Kravchenko, Mykola Ilin, Yulia Gripich

9:40

Session 1

Distributed Computing and Large Scale Applications

Chair person: Ladislav Hluchý

Performance Analysis of Parallel Algorithm for Backtracking

Karol Grondžák, Penka Martincová, and Matúš Chochlík

Multicore Processor Architecture for Flight Simulator Modeling

Peter Kvasnica, Tomáš Páleník

Static Job Scheduling in the Grid

Penka Martincová, Karol Grondžák, and Matúš Chochlík

High-resolution Visualisation in Cluster Environment

Branislav Sobota, Ján Perháč, Csaba Szabó, and Štefan Schrötter

11:15

Session 2

Computational Chemistry & Material Science

Chair person: Sergii Skakun

Trying to Model the Dissipative Processes Inside a Material Using a Universal Constitutive Equation with Internal Damping for Fully Coupled Thermal-structural Analysis
Ladislav ěcsi, Pavel ělesztős, Viera Šipková, Miroslav Dobrucký, and Ján Astaloš

Material Tension Stress-strain Curve Determination via Inverse Analysis Using Finite Element Method in Computational Grids – Implementation of the Mathematical Model
Ladislav ěcsi, Pavel ělesztős, Viera Šipková, Miroslav Dobrucký, and Ján Astaloš

Computational “Virtual laboratory” tools for Biomolecular and Drug Design
István Komáromi, László Tóth and Tibor Kozár

Parallelization of Algorithms for Stochastic Reaction Kinetics
Zdenko Turčan and Jozef Uličný

13:35

Invited lecture

Using the GRID for Forest Fire Front Evolution Prediction
Nikos Voutsinas, Demetris Manatakis, and Elias Manolakos

14:15

Session 3

Grid and Service-oriented Computing

Chair person: Viera Rozinajová

Establishing Semantic Annotation of the Text-mining Services
Marian Babik, Martin Sarnovsky, and Zoltan Durcik

Secure management of crises situations using mobile code in untrustworthy distributed computing environment
Zoltán Balogh, Ivana Budinská, Branislav Šimo

Management of Distributed Metadata
Ondrej Habala, Branislav Šimo, and Ladislav Hluchý

15:30

Session 4

Grid Workflow and Parallelism

Chair person: Elias Manolakos

Visual Support of Workflow Composition Involving Collaboration
Peter Bartaloš, Ivan Kapustík, and Vierka Rozinajová

A Survey of Approaches to Automatic Workflow Composition
Branislav Šimo

Towards an Advanced Distributed Computing
Viera Šipková and Miroslav Dobrucký

16:30

Tutorial

Developing and executing complex applications on production grids with P-GRADE Portal
Lecturer: Robert Lovas

Wednesday October 29, 2008

9:00

Invited lecture

A Graphical Frontend to Key Services for Utilization of Grid Environments: A CharonGUI Use Case

Vítězslav Plšek, Jan Kmuníček, and Martin Kuba

9:40

Session 5

Astronomy & Astrophysics and High energy Physics

Chair person: Tibor Kožár

Extended Modeling of the Oort Cloud Formation from the Initial Proto-planetary Disc

Tomáš Paulech, Marián Jakubík, Luboš Neslušan, Piotr Andrzej Dybczynski, and Giuseppe Leto

Visualization tool for Grid-based applications

Eva Pajorová, Marián Jakubík, Luboš Neslušan, Peter Slížik, Ladislav Hluchý

Using the GRID Infrastructure for Local Hadronic Calibration of the Experiment ATLAS Calorimetric System

Pavel Stavina, Tibor Zenis, Pavol Strizenec, Pavol Bartos, Lucia Batkova, Pavol Federic, Viliam Pazma, Martin Pecszy, Julius Vanko, and Matej Zagiba

ATLAS on Slovak GRID

Tibor Ženiš, Pavel Šťavina, Pavol Stríženec, Pavol Bartoš, Lucia Bátková, Pavol Federič, Viliam Pažma, Martin Pecszy, Július Vanko, and Matej Zagiba

11:15

Training course (including tutorial) for Grid users and application developers

Participants of the hands-on tutorial should have a Linux user background and must bring their own laptops with an ssh client (e.g. PuTTY).

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

Programme schedule:

- Introduction to Grid and EGEE infrastructure (15-20min / Dobrucky)
- Grid security and getting the access to the Grid (15-20min / Dobrucky)
- Grid computing - principles of parallel and distributed computing (15-20min / Sipkova)
- Development of Grid applications (15-20min / Tran)
- Overview of the Grid middlewares and high-level tools (15-20min / Tran)
- gLite middleware (30min / Sipkova)

14:30

Hands-on tutorial

Basic practicals with the gLite middleware (security, job, and data management) using both the Command Line Interface and Genius portal. (1h 30min)

Lecturers: Miroslav Dobrucký, Viera Šípková, Viet D. 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.