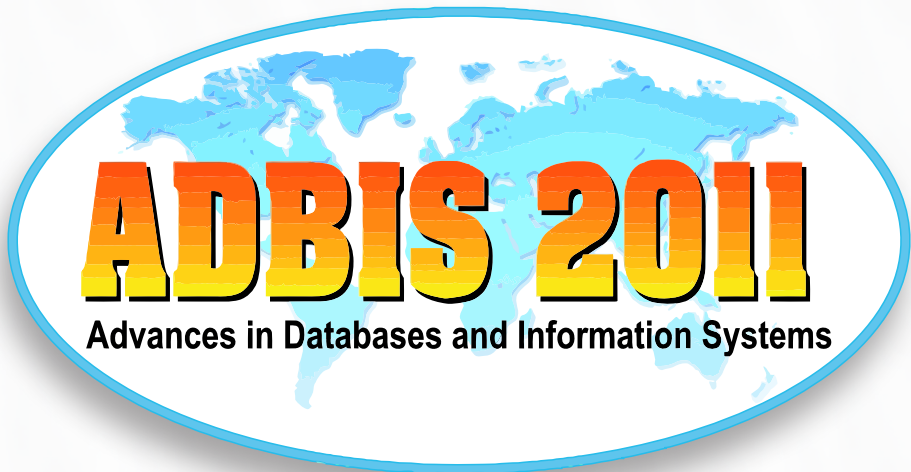




**THE 15TH EAST EUROPEAN CONFERENCE ON
ADVANCES IN DATABASES
AND
INFORMATION SYSTEMS
(ADBIS 2011)**

September 20-23, 2011
Vienna, Austria

ORGANISERS

The ADBIS 2011 is jointly organised by the

Institute of Software Technology and Interactive Systems,
Information & Software Engineering Group



TECHNISCHE
UNIVERSITÄT
WIEN
Vienna University of Technology

and the Austrian Computer Society (OCG)



**OESTERREICHISCHE[®]
COMPUTER GESELLSCHAFT**

**AUSTRIAN
COMPUTER SOCIETY**

ADBIS 2011

PROGRAMME GUIDE

TABLE OF CONTENTS

Organisers.....	2
Organizing Committee	4
Venue	5
General Information	6
Registration	6
Wireless (WLAN)	6
Name Badges	6
Speakers & Presentations.....	6
Information & Contact.....	6
Lunch	7
Room Assignments	8
Plans.....	9
Vienna Subway System.....	13
Social Events.....	14
Conference Banquet.....	14
Conference Reception	15
Conference Program.....	16
PC Members	27

ORGANIZING COMMITTEE

General Chair

A Min Tjoa, Vienna University of Technology, Austria

PC Co-Chairs

Johann Eder, Alps Adria University Klagenfurt, Austria

Maria Bielikova, Slovak University of Technology Bratislava, Slovakia

Workshop Co-Chairs

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Klaus-Dieter Schewe, Software Competence Center Hagenberg, Austria

Robert Wrembel, University of Poznan, Poland

Doctoral Consortium Chairs

Rainer Manthey, University of Bonn, Germany

Boris Novikov, St-Petersburg University, Russia

ADBIS Steering Committee Chair

Leonid Kalinichenko, Russian Academy of Science, Russia

Organization Co-Chairs

A Min Tjoa, Vienna University of Technology, Austria

Nick A. Tahamtan, Vienna University of Technology, Austria

VENUE

The conference venue is the Vienna University of Technology (TU Wien). The conference is being held in the MAIN building. The exact address of the conference location is:

TU Wien – Main Building

Karlsplatz 13

1040 Wien

The venue is located near the center of Vienna, easily reachable through the subway station KARLSPLATZ (subway lines U1, U2, and U4). The venue can also be reached by tram lines 62 and 65 (stop „Resselgasse“) and bus line 59A (stop „Bärenmühldurchgang“).

Here a picture of the Main building:



GENERAL INFORMATION

Registration

The registration desk is located in the main building on the ground floor. Registration is possible on every day of the conference starting 8:00 a.m.

Wireless (WLAN)

The conference venue is covered by a wireless local area network (WLAN) (except for the lunch area). Your access data is handed out to you upon registration.

Name Badges

Conference attendees are required to wear their badges while in the conference area and during social events, in order to facilitate identification of registered participants.

Speakers & Presentations

Speakers are requested to contact the Session Chair or Technical Assistant before their session. Presentations should be copied to the presentation computers in the break before the respective session at the latest.

Information & Contact

Notice-boards and an information desk are located near the registration area at the Main Building.

Lunch

Lunch is included in the registration fee and is served in the Mensa, which is located in FREIHAUS building (about 50 meters away from the main building).

Here a picture of the Freihaus.



ROOM ASSIGNMENTS

The conference sessions are held in the following rooms:

Festsaal - Main Building, Stiege I, 1st Floor

Boecklsaal – Main Building, Stiege I, 1st Floor

HS 14A - Main Building, Stiege III, 3rd Floor

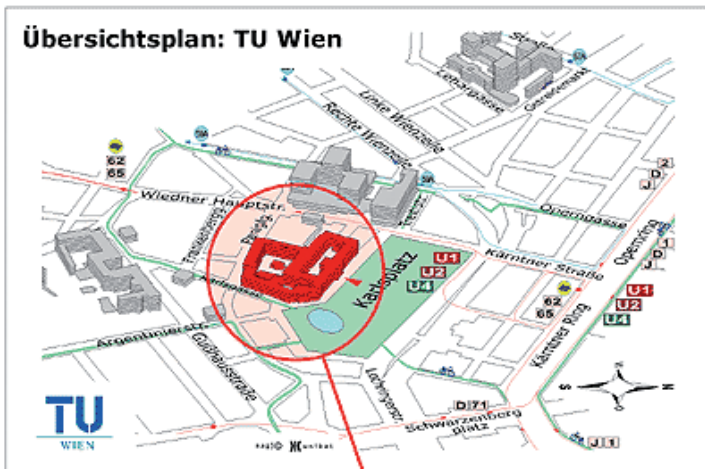
HS 15 - Main Building, Stiege III, 3rd Floor

Please refer to the maps on the following pages for locating the rooms and mind the signs.

Lageplan: Festsaal, TU Wien,

A-1040 Wien, Karlsplatz 13, Hauptgebäude, 1.Obergeschoß, Stiege I

Übersichtsplan: TU Wien

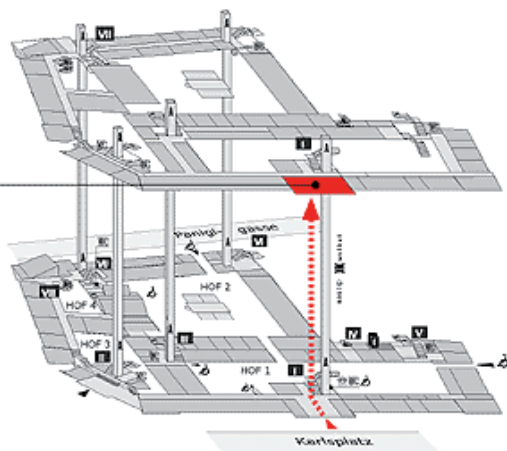


Detailplan: Hauptgebäude

1.Obergeschoß

Festsaal

Erdgeschoß



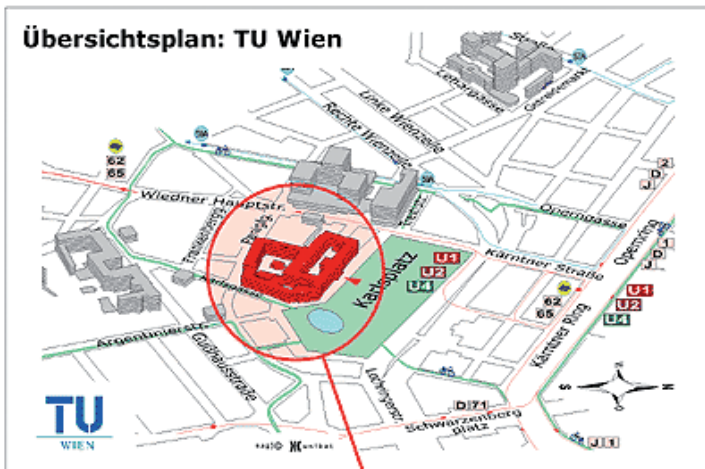
Symbollegende siehe unter www.wegweiser.ac.at/symbollegende.html

unikat

Lageplan: Boecklsaal, TU Wien,

A-1040 Wien, Karlsplatz 13, Hauptgebäude, 1.Obergeschoß, Stiege I

Übersichtsplan: TU Wien

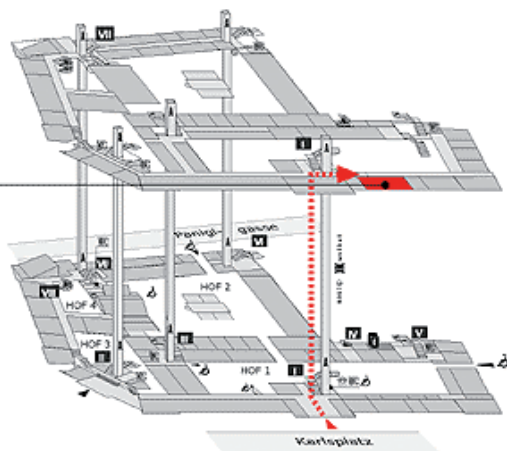


Detailplan: Hauptgebäude

1.Obergeschoß

Boecklsaal

Erdgeschoß



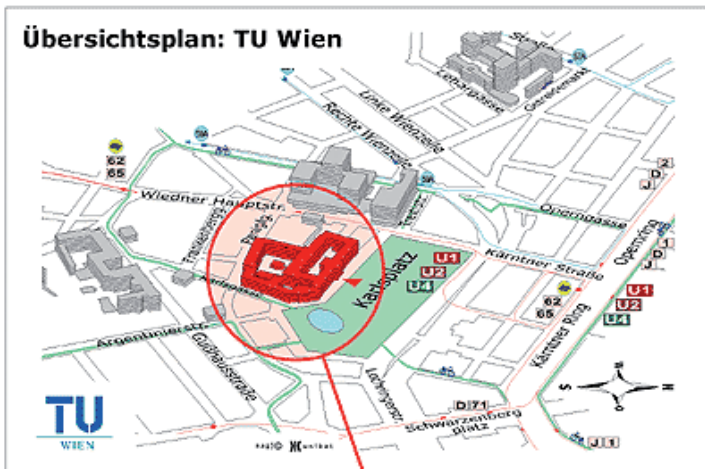
Symbollegende siehe unter www.wegweiser.ac.at/symbollegende.html

unikat 

Lageplan: HS 14, TU Wien,

A-1040 Wien, Karlsplatz 13, Hauptgebäude, 3.Obergeschoß, Stiege III

Übersichtsplan: TU Wien

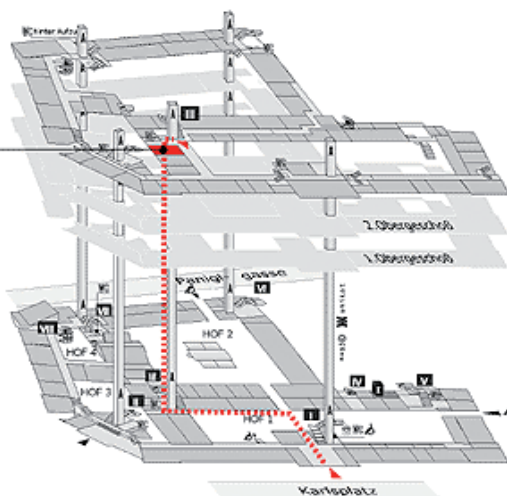


Detailplan: Hauptgebäude

3.Obergeschoß

HS 14

Erdgeschoß



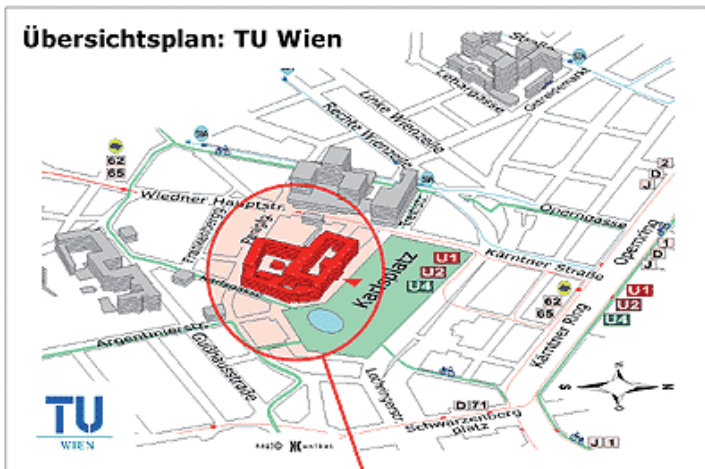
Symbollegende siehe unter www.wegweiser.ac.at/symbollegende.html

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Lageplan: HS 15, TU Wien,

A-1040 Wien, Karlsplatz 13, Hauptgebäude, 3.Obergeschoß, Stiege III

Übersichtsplan: TU Wien

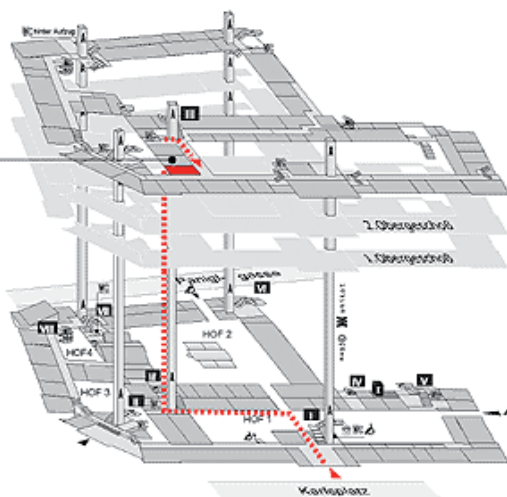


Detailplan: Hauptgebäude

3.Obergeschoß

HS 15

Erdgeschoß



Symbollegende siehe unter www.wegweiser.ac.at/symbollegende.html

unikat 

U-Bahn in Wien

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Tramway-Museum

Wiener Linien

Kundenzentrum



SOCIAL EVENTS

CONFERENCE BANQUET

Wednesday 21.09.2011, Stift Klosterneuburg

Please bring the Dinner Invitations handed out upon Registration!

Meeting point for the bus transfer to Klosterneuburg will be announced during the conference.

Klosterneuburg was founded in 1114 by Leopold III, Margrave of Austria and his wife Agnes. It became a house of Augustinian Canons in 1133.

This foundation is one of the oldest and richest of its kind in Austria and owns much of the land upon which the north-western suburbs of Vienna stand.

The impressive building complex, the greater part of which was constructed between 1730 and 1834, stands on a hill rising directly from the banks of the Danube.



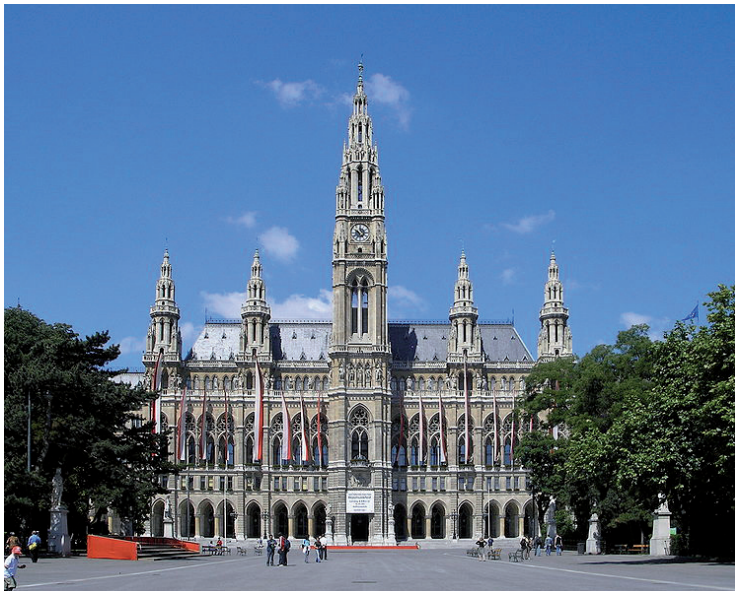
Stift Klosterneuburg

CONFERENCE RECEPTION

Thursday 22.09.2011, Vienna City Hall (Rathaus)

Please bring the Reception Invitations handed out upon Registration!

A walk to the Rathaus will take you along the Ringstraße, Emperor Franz Josef's circular boulevard surrounding the inner city of Vienna. Crossing Karlsplatz, the tour starts at the Opera House and passes along many of Vienna's main attractions: the Hofburg Palace (the president's residence), the Burg garden, Kunst-historisches Museum (Museum of Fine Arts), Natur-historisches Museum (Museum of Natural History), the Parliament and the Burgtheater, finally traversing the Rathauspark, the garden of Vienna's City Hall. If you prefer faster transfer, you can take tram line 1 or D at the Opera and go to Burgtheater, which is facing the City Hall.



City Hall Vienna

CONFERENCE PROGRAM

Location: Main Building of the University of Technology Vienna
Karlsplatz 13, 1040 Wien, Austria

Tuesday 20.09.2011

9:00-9:30 Opening

9:30-10:30 **Session 1 Keynote**

Session Chair: Leonid Kalinichenko

Georg Gottlob

Ontological Query Answering via Rewriting

10:30-11:00 Coffee Break

11:00-12:30 **Session 2A: Session Query Processing 1**

Session Chair: Rainer Manthey

M. Benter, S. Böttcher, R. Hartel

Mixing Bottom-Up and Top-Down XPath Query Evaluation

D. Christopeit, M. Böhlen, C.-K. Kanne, A. Mazeika

Querying Versioned Software Repositories

K. Patroumpas, T. Sellis

Subsuming Multiple Sliding Windows for Shared Stream Computation

Session 2B: Business Process Management

Session Chair: Amirezza Nick Tahamtan

C. Combi, M. Gambini, S. Migliorini

Towards Structured Business Process Modeling Languages

G. Pozzi, S. Morasca, A. Antonini, A. Ferreira Mello

Software Measures for Business Processes

C. Combi, S. Degani

Seamless (and Temporal) Conceptual Modeling of Business Process Information

12:30-14:00 Lunch Break

14:00-15:30 Session 3A: Data Warehousing 1

Session chair: Tadeusz Morzy

N. Hanusse, S. Maabout, R. Tofan

Revisiting the Partial Data Cube Materialization

J. Aligon, M. Golfarelli, P. Marcel, S. Rizzi, E. Turricchia

Mining Preferences from OLAP Query Logs for Proactive Personalization

P. Darcy, B. Stantic, A. Sattar

A Novel Integrated Classifier for Handling Data Warehouse Anomalies

Session 3B: Workflow

Session Chair: Carlo Combi

S. Schick, H. Meyer, A. Heuer

Enhancing Workflow Data Interaction Patterns by a Transaction Model

K. Bouchbout, Z. Alimazighi

Inter-Organizational Business Processes Modelling Framework

Y. Li, O. Boucelma

A CPN Provenance Model of Workflow: Towards Diagnosis in the Cloud

15:30-16:00 Coffee Break

16:00-17:30 **Session 4A: Data Warehousing 2**

Session Chair: Alfredo Cuzzocrea

J. Terry, B. Stantic, P. Terenziani, A. Sattar

Variable Granularity Space Filling Curve for Indexing Multidimensional Data

K. Kaczmarek, T. Rudny

MOLAP Cube Based on Parallel Scan Algorithm

S. Wittmer, T. Lauer, A. Datta

Real-Time Computation of Advanced Rules in OLAP Databases

Session 4B: Information Systems

Session Chair: Pavol Navrat

C. I. Sidló

Entity Resolution with Heavy Indexing

Z. Harsányi, M. Repta, V. Rozinajová

Innovative Mashup Development: Utilizing Visual Information about Application Programming Interfaces

M. Liebisch

Accessing Functional Aspects with Pure SQL - Lessons Learned

Wednesday 21.09.2011

9:00-10:30 **Session 5 Keynote**

Session Chair: A Min Tjoa

Monika Henzinger

Sponsored Search Auctions or How Web Search Engines Make Money

10:30-11:00 Coffee Break

11:00-12:30 **Session 6A: DB Systems**

Session Chair: Barbara Catania

I. Koltsidas, S. Viglas

Designing a Flash-Aware Two-Level Cache

C. Tilgner, B. Glavic, M. Boehlen, C.-C. Kanne

Declarative Serializable Snapshot Isolation

I. Epimakhov, A. Hameurlain, T. Dillon, F. Morvan

Resource Scheduling Methods for Query Optimization in Data Grid Systems

Session 6B: Doctoral Consortium 1

Session Chairs: Rainer Manthey, Boris Novikov

12:30-14:00 Lunch Break

14:00-15:30 Session 7A: Spatial Data

Session Chair: Yannis Manolopoulos

B. Catania, M. T. Pinto, P. Podesta, D. Pomerano

A Recommendation Technique for Spatial Data

G. Trajcevski, A. Yaagoub, P. Scheuermann

Processing (Multiple) Spatio-Temporal Range Queries in Multicore Settings

G. Roumelis, M. Vassilakopoulos, A. Corral

Performance Comparison of xBR-Trees and R-Trees for Single Dataset Spatial Queries*

Session 7B: Doctoral Consortium 2

Session Chairs: Rainer Manthey, Boris Novikov

15:30-16:00 Coffee Break

16:00-17:30 Session 8A: Query Processing 2

Session Chair: Albertas Caplinskas

O. Pivert, G. Smits, A. Hadjali, H. Jaudoin

Efficient Detection of Minimal Failing Subqueries in a Fuzzy Querying Context

H. Jaudoin, O. Pivert

Rewriting Fuzzy Queries Using Imprecise Views

N. Spyrtatos, T. Sugibuchi, J. Yang

Personalizing Queries over Large Data Tables

Session 8B: Doctoral Consortium 3

Session Chairs: Rainer Manthey, Boris Novikov

19:00-23:00 Conference Dinner Klosterneuburg

Thursday 22.09.2011

9:00-10:30 **Session 9 Keynote**

Session Chair: Johann Eder

Marlon Dumas

On the Convergence of Data and Process Engineering

10:30-11:00 Coffee Break

11:00-12:30 **Session 10A: Information Systems 1**

Session Chair: Maria Bielikova

D. Schall, F. Skopik

An Analysis of the Structure and Dynamics of Large-Scale Q/A Communities

L. Dannecker, M. Böhm, W. Lehner, G. Hackenbroich

Forecasting Evolving Time Series of Energy Demand and Supply

C. Combi, M. Gambini, S. Migliorini

The NestFlow Interpretation of Workflow Control-Flow Patterns

Session 10 B: Security and Privacy

Session Chair: Hendrik Decker

A. Cuzzocrea, D. Saccà

A Constraint-Based Framework for Computing Privacy Preserving OLAP Aggregations on Data Cubes

S. Chester, B. Kapron, G. Ramesh, G. Srivastava, A. Thomo, S. Venkatesh

K-Anonymization of Social Networks by Vertex Addition

H. H. Nguyen, N. Harbi, J. Darmont

An Efficient Fuzzy Clustering-Based Approach for Intrusion Detection

12:30-14:00 Lunch Break

14:00-15:30 **Session 11A: Physical DB Design**

Session Chair: Boris Novikov

R. Bouchakri, L. Bellatreche

On Simplifying Integrated Physical Database Design

M. Brut, S. Laborie, A.-M. Manzat, F. Sedes

Generic Information System Architecture for Distributed Multimedia Indexation and Management

J. Patvarczki, N. Heffernan

Automatic Physical Database Tuning Middleware for Web-Based Applications

Session 11B: **Information Systems 2**

Session Chair: Robert Wrembel

K. Jannaschk, C. A. Rathje, B. Thalheim, F. Förster

A Generic Database Schema for CIDOC-CRM Data Management

S. Pohorec, M. Zorman

Formalization of Unstructured Content to Semantic Form

B. Perez, D. Correal

MENTA: A Quality Analysis Approach for Self-Adapting Systems

15:30-16:00 Coffee Break

16:00-17:30 **Session 12A: Evolution, Integrity, Security**

Session Chair: Andras Benczur

J. Maly, M. Necasky, I. Mlynkova

XML Documents Transformations as Schema Evolves

H. Decker

Partial Repairs that Tolerate Inconsistency

S. Sobieski, B. Zielinski

Modularisation in Maude of Parametrized RBAC for Row Level Access Control

Session 12B: Ontologies

Session Chair: Ladjel Bellatreche

W. Abramowicz, E. Bukowska, J. Dzikowski, A. Filipowska, M. Kaczmarek

Semantically Enabled Experts Finding System - Ontologies, Reasoning Approach and Web Interface Design

A. Simonet, M. Simonet

Information System Design Based on a Domain Ontology and Users Requirements

L. Kalinichenko, S. Stupnikov

OWL as Yet Another Data Model to be Integrated

19:00-22:00 Conference Reception at City Hall

Friday 23.09.2011

9:00-10:30 **Session 13A: Data Semantics**

Session Chair: François Bry

A. Algergawy, S. Massmann, E. Rahm

*A Clustering-Based Approach for Large-Scale
Ontology Matching*

C. Niang, B. Bouchou, M. Lo, Y. Sam

*Automatic Building of an Appropriate Global
Ontology*

C. Debruyne, R. Meersman

*Semantic Interoperation between Business
Information Systems by Evolving Ontologies
through Formalized Social Processes*

Session 13B: Queries

Session Chair: Tadeusz Morzy

**P. Wisniewski, A. Szumowska, M. Burzanska, A.
Boniewicz**

*Hibernate the Recursive Queries - Defining the
Recursive Queries Using Hibernate ORM*

E. Hornicak, M. Ondreicka, J. Pokorny, P. Vojtas

*Multi-User Searching of Top-k Objects with Data on
Remote Servers*

A. Yarygina, B. Novikov, N. Vassilieva

*Processing Complex Similarity Queries: A
Systematic Approach*

10:30-11:00 **Coffee Break**

11:00-12:00 **Session 14: System Issues**

Session Chair: Jaroslav Pokorny

N. Cipriani, M. Großmann, H. Sanftmann, B. Mitschang

Design Considerations of a Flexible Data Stream Processing Middleware

K. Kaczmarski

Experimental B+-Tree for GPU

12:00-12:30 Closing of the Conference

PC MEMBERS

Suad Alagic	University of Southern Maine, USA
Costin Badica	University of Craiova, Romania
Ladjel Bellatreche	Laboratoire d'Informatique Scientifique et Industrielle, France
Alberto Belussi	University of Verona, Italy
Andras Benczur	Hungarian Academy of Sciences, Hungary
Maria Bielikova	Slovak University of Technology in Bratislava, Slovakia
Omar Boucelma	Laboratoire des Sciences de l'Information et des Systemes, France
Stephane Bressan	National University of Singapore, Singapore
Dumitru Dan Burdescu	University of Craiova, Romania
Albertas Caplinskas	Institute of Mathematics and Informatics, Lithuania
Barbara Catania	Universita' di Genova, Italy
Wojciech Cellary	Technical University of Poznan, Poland
Alfredo Cuzzocrea	Italian National Research Council, Italy
Schahram Dustdar	Vienna University of Technology, Austria
Pedro Furtado	Universidade de Coimbra, Portugal
Jan Genci, Technical	University of Kosice, Slovakia
Matteo Golfarelli	University of Bologna, Italy
Giovanna Guerrini	Universita di Genova, Italy
Stephen Hegner	Umea University, Sweden
Mirjana Ivanovic	University of Novi Sad, Serbia
Leonid Kalinchenko	Institute of Informatics Problems of the Russian Academy of Science, Russia
Ahto Kalja	Kuerneretika Instituut, Estonia

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Panagiotis Karras	National University of Singapore, Singapore
Christian Koncilia	Alps Adria University Klagenfurt, Austria
Harald Kosch	University of Passau, Germany
Sergei Kuznetsov	University of Colorado, USA
Federica Mandreoli	University of Modena, Italy
Rainer Manthey	University of Bonn, Germany
Paolo Missier	The University of Manchester, UK
Alexandros Nanopoulos	University of Hildesheim, Germany
Pavol Navrat	Slovak University of Technology, Slovakia
Daniel Neagu	University of Bradford, UK
Nikolaj Nikitchenko	Nat. Univ. Kiev, Ukraine
Boris Novikov	St-Petersburg University, Russia
Thimios Panagos	Telcordia Applied Research, USA
Jaroslav Pokorny	Charles University in Prague, Czech Republic
Jolita Ralyte	University of Geneva, Switzerland
Stefano Rizzi	University of Bologna, Italy
Paolo Rosso	Universidad Politecnica de Valencia, Spain
Viera Rozinajova	Slovak University of Technology, Slovakia
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Bernhard Thalheim	Christian-Albrechts-Universität zu Kiel, Germany

Stefan Trausan-Matu	Universitatea Politehnica Bucures, Romania
Athena Vakali	Aristotle University of Thessaloniki, Greece
Olegas Vasilecas	VGTU Faculty of Fundamental Sciences, Lithuania
Panos Vassiliadis	University of Ioannina, Greece
Peter Vojtas	Charles University in Prague, Czech Republic
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Vladimir Zadorozhny	University of Pittsburgh, USA
Jaroslav Zendulka	Brno University of Technology, Czech Republic

NOTES

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