# ADBIS 2007
## Conference Programme

## Saturday, 29.09.2007

*13:00 – 19:00  Registration*  **- Hall 0**
*19:00 – 21:00  Welcome drink* **in the Koral Hotel**

## Sunday, 30.09.2007

*09:00*      ***Opening Ceremony***  **Hall 1**  Chair: Boris Rachev
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**09:30**     **Invited  Talk 1**
              Conference  **Hall 1**            Chair: Yannis Ioannidis
   **ETL Workflows: From Formal Specification to Optimization**      1
              *Timos K. Sellis, Alkis Simitsis*
              **Abstract**

In this paper, we present our work on a framework towards the modeling and optimization of Extraction-Transformation-Loading (ETL) workflows.

The goal of this research was to facilitate, manage, and optimize the design and implementation of the ETL workflows both during the initial design and deployment stage, as well as, during the continuous evolution of a data warehouse. In particular, we present our results which include: (a) the provision of a novel conceptual model for the tracing of inter-attribute relationships and the respective ETL transformations in the early stages of a data warehouse project, along with an attempt to use ontology-based mechanisms to semi-automatically capture the semantics and the relationships among the various sources; (b) the provision of a novel logical model for the representation of ETL workflows with two main characteristics: genericity and customization; (c) the semi-automatic transition from the conceptual to the logical model for ETL workflows; and (d) the tuning of an ETL workflow for the optimization of the execution order of its operations.

Finally, we discuss some issues on future work in the area that we consider important and a step towards the incorporation of the above research results to other areas as well.

 >>>>>>>>>>>> *11:00 - Coffee Break*
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**11:30   Session 1:** *Activity Modeling*
Conference **Hall 4**        Session Chair: Yannis Manolopoulos

1. **A Protocol Ontology for Inter-Organizational Workflow Coordination**
   *Eric Andonoff, Wassim Bouaziz, Chihab Hanachi*
2. **Preventing Orphan Requests by Integrating Replication and Transactions**
   *Heine Kolltveit, Svein-Olaf Hvasshovd*
3. **Discretization Numbers for Multiple-Instances Problem in Relational Database**
   *Rayner Alfred, Dimitar Kazakov*

*>>>>>>>>>>>> 13:00 – Lunch Break*

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**14:30   Session 2A:** *Classification*
Conference  **Hall 4**        Session Chair: Tadeusz Morzy

1. **Adaptive k-NN Classification Based on a Dynamic Number of Nearest Neighbors**
   *Stefanos Ougiaroglou, Alexandros Nanopoulos, Apostolos N. Papadopoulos, Yannis Manolopoulos, Tatjana Welzer-Druzovec*
2. **Database Implementation of a Model-Free Classifier**
   *Konstantinos Morfonios*

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**14:30   Session 2B:** *Design*
Conference  **Hall 5**        Session Chair: Jaroslav Pokorny

1. **Update Support for Database Views via Cooperation**
   *Stephen J Hegner, Peggy Schmidt*
2. **An Agile Process for the Creation of Conceptual Models from Content Descriptions**
   *Sebastian Bossung, Hans-Werner Sehring, Henner Carl, Joachim W. Schmidt*
3. **CUDL Language Semantics, Liven up the FDB Data Model**
   *Nikitas Karanikolas, Maria Nitsiou, Emmanuel Yannakoudakis, Christos Skourlas*

*>>>>>>>>>>>> 16:00 - Coffee Break*

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**16:30   Session 3A:** *Object-Oriented Systems*
Conference  **Hall 4**        Session Chair: Leonid Kalinichenko

1. **ODRA: A Next Generation Object-Oriented Environment for Rapid Database Application Development**
   *Michal Lentner, Kazimierz Subieta*
2. **An Object-Oriented Based Algebra for Ontologies and their Instances**
   *Stéphane Jean, Yamine Aït-Ameur, Guy Pierra*

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**16:30    Session 3B:** *Rules and Reasoning*
　　　　Conference **Hall 5**　　　　　　Session Chair: Pavol Navrat

1.  **Design of Web Agents Inspired by Brain Research**
　　　*Maya Dimitrova, Hiroaki Wagatsuma, Yoko Yamaguchi*
2.  **Business Rule Based Software System Configuration Management and Implementation Using Decision Tables**
　　　*Olegas Vasilecas, Aidas Smaizys*

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*18:00 - SC Meeting* – **Hall 4**

# Monday,  01.10.2007

**9:30    Invited  talk 2**
　　　　Conference **Hall 1**　　　　　　Chair: Boris Novikov
　　　　**Harvesting and Organizing Knowledge from the Web**
　　　　*Gerhard Weikum*

　　　　**Abstract**
　　　　Information organization and search on the Web is gaining structure and context awareness and more semantic flavor, for example, in the forms of faceted search, vertical search, entity search, and Deep-Web search. I envision another big leap forward by automatically harvesting and organizing knowledge from the Web, represented in terms of explicit entities and relations as well as ontological concepts. This will be made possible by the confluence of three strong trends: 1) rich Semantic-Web-style knowledge repositories like ontologies and taxonomies, 2) large-scale information extraction from high-quality text sources such as Wikipedia, and 3) social tagging in the spirit of Web 2.0. I refer to the three directions as Semantic Web, Statistical Web, and Social Web (at the risk of some oversimplification), and I briefly characterize each of them.

*>>>>>>>>>>>>11:00 - Coffee Break*

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**11:30    Session 4A:** *Indexing*
　　　　Conference **Hall 4**　　　　　　Session Chair: Rainer Manthey

1.  **The MM-tree: A Memory-Based Metric Tree Without Overlap Between Nodes.**
　　　*Ives Rene Venturini Pola, Caetano Jr Traina, Agma Juci Machado Traina*
2.  **Improving the Performance of M-tree Family by Nearest-Neighbor Graphs**
　　　*Tomas Skopal, David Hoksza*

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3. **Indexing Mobile Objects on the Plane Revisited**
   *S. Sioutas, K. Tsakalidis, K. Tsihlas, C. Makris, Y. Manolopoulos*

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**11:30**    **Session 4B:** *Clustering and OLAP*
            Conference **Hall 5**           Session Chair: Tadeusz Morzy

1. **A Clustering Framework for Unbalanced Partitioning and
Outlier Filtering on High Dimensional Datasets**
   *Turgay Tugay Bilgin, Ali Yilmaz Camurcu*
2. **Clustering Approach to Generalized Pattern Identification
Based on Multi-instanced Objects with DARA**
   *Rayner Alfred, Dimitar Kazakov*
3. **Imprecise Data and Knowledge Based OLAP**
   *Ermir Rogova, Panagiotis Chountas, Krassimir Atanassov*

>>>>>>>>>>>>> *13:00 – Lunch Break*

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*14:30 – 18:00  Excursion*
            **The Excursion starts from F.J.Curie.
            Our tour shows the Black Sea coast from St.St. Constantine&Helena
            Resort to Cape Kaliakra.**

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# Tuesday,  2.10.2007

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**09:30**    **Invited  Talk 3**
            Conference **Hall 1**           Chair: Leonid Kalinichenko
      **Schema and data translation: A personal perspective**
            *Paolo Atzeni*
            **Abstract**

The problem of translating schemas and data form a model to another has been under the attention of database researchers for decades, but definitive solutions have not been reached.

Motivation for the problem comes from the variety of sources available in modern systems, which often use different approaches (and data models) for the organization of information.

The topic is discussed here by first setting the context with reference to the recent proposal for model management system, which considers an even wider set of requirements. Then, definitions are given for the problem of schema and data translation and for the related one concerning data exchange. Some side technical issues are then discussed: how schemas, models and mappings are described, and what is the relationship between source and target schemas in terms of information capacity. Finally, a specific proposal for data translation is discussed in some detail.

>>>>>>>>>>>>> *11:00 -  Coffee Break*

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**11:30**    **Session 5:** *Moving Objects*
            Conference **Hall 4**          Session Chair: Albertas Caplinskas

1. **On the Effect of Trajectory Compression in Spatiotemporal Querying**
        *Elias Frentzos, Yannis Theodoridis*
2. **Prediction of Bus Motion and Continuous Query Processing**
**for Traveler Information Services**
        *Bratislav Predic, Dragan Stojanovic, Slobodanka Djordjevic-*
*Kajan, Aleksandar Milosavljevic, Dejan Rancic*
3. **Optimal Query Mapping in Mobile OLAP**
        *Ilias Michalarias, Hans-J. Lenz*

>>>>>>>>>>>> *13:00 – Lunch Break*
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**14:30**    **Session 6A:** *Query Processing*
            Conference **Hall 4**          Session Chair:  Jaroslav Pokorny

1. **A Statistics Propagation Approach to Enable Cost-Based Op-**
**timization of Statement Sequences**
        *Tobias Kraft, Holger Schwarz, Bernhard Mitschang*
2. **A Fixpoint Approach to State Generation for Stratifiable Dis-**
**junctive Deductive Databases**
        *Andreas Behrend*
3. **Querying Multidimensional Databases**
        *Franck Ravat, Olivier Teste, Ronan Tournier, Gilles Zurfluh*
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**14:30**    **Session 6B:** *DB Architectures and Streams*
            Conference **Hall 5**          Session Chair: Rainer Manthey

1. **Incremental Validation of String-based XML Data in Databases,**
**File Systems, and Streams**
        *Beda Christoph Hammerschmidt, Christian Werner, Ylva*
*Brand, Volker Linnemann, Sven Groppe and Stefan Fischer*
2. **Fast and efficient log file compression**
        *Przemyslaw Skibinski, Jakub Swacha*
3. **Efficient Processing Regular Queries In Shared-Nothing**
**Parallel Database Systems Using Tree- And Structural Indexes**
        *Vu Le Anh, Attila Kiss*

>>>>>>>>>>>> *16:00 -* *Coffee break*
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**16:30     Session 7:** *XML and Databases*
             Conference **Hall 4**          Session Chair: Boris Rachev

 1. **Combining efficient XML compression with query processing**
        *Przemyslaw Skibinski, Jakub Swacha*
 2. **Approximate functional dependencies for XML data**
        *Fabio Fassetti, Bettina Fazzinga*
 3. **Tailor-Made Native XML Storage Structures**
        *Karsten Schmidt, Theo Härder*
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***20:00 Dinner in the "Poda" Restaurant near Varna (The transportation will be by bus from the F.J.Curie at 19:00)***

# Wednesday, 03.10.2008

**09:30     Session 8:** *Adaptive systems*
             Conference  **Hall 4**          Session Chair: Andras Benczur

 1. **A method for comparing self-organizing maps: case studies of banking and linguistic data**
        *Toomas Kirt, Ene Vainik, Leo Võhandu*
 2. **Towards Self-Optimization of Message Transformation Processes**
        *Matthias Boehm, Dirk Habich, Uwe Wloka, Jurgen Bittner, and Wolfgang Lehner*
 3. **Applying User Profile Ontology for Mining Web Site Adaptation Recommendations**
        *Tarmo Robal, Ahto Kalja*

*>>>>>>>>>>>> 11:00 - Coffee Break*
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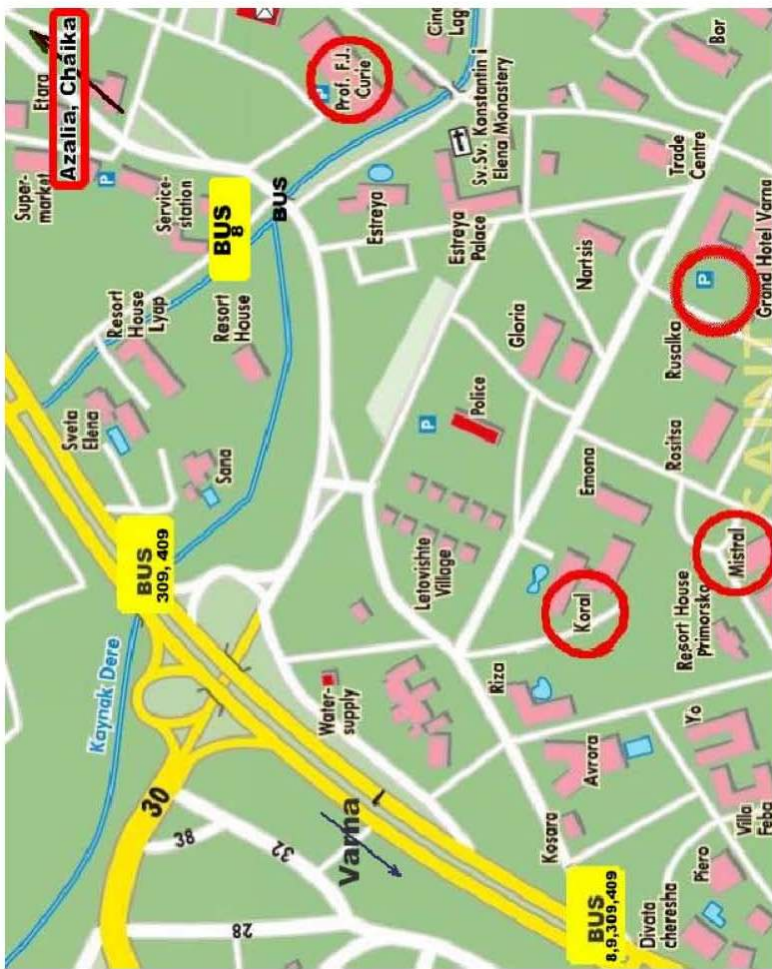**11:30     Session 9:** *Distributed Systems*
             Conference **Hall 4**          Session Chair: Karel Richta

 1. **Fast User Notification in Large-Scale Digital Librairies: Experiments and Results**
        *H. Belhaj Frej, P. Rigaux, and N. Spyratos*
 2. **Quete: Ontology-Based Query System for Distributed Sources**
        *Haridimos Kondylakis, Anastasia Analyti, Dimitris Plexousakis*
 3. **Aggregating Multiple Instances in Relational Database Using Semi-Supervised Genetic Algorithm-based Clustering Technique**
        *Rayner Alfred, Dimitar Kazakov*

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***13:00     Closing Ceremony*  Hall 5**   Chair: Boris Rachev

St.St. Constantine and Helena Resort