

# **The 5<sup>th</sup> International Conference on Semantics, Knowledge and Grid**

**(SKG 2009 Program Tentative)**

**Zhuhai, China**

**Oct. 12 – 14, 2009**



## Conference Co-Chairs

Tharam Dillon, Curtin University of Technology, Australia

Geoffrey Fox, Indiana University, USA

Hai Zhuge, Chinese Academy of Sciences, China

## Program Co-Chairs:

Xiaoping Sun, Chinese Academy of Sciences, China

Xin Dong AT&T Labs-Research, USA

Qing Li, City University of Hong Kong, China

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# SKG2009 Program

**Monday** (Oct.12)

14:00-  
20:00

Registration (Zhuhai Holiday Resort Hotel)

Tutorial

[Chair: Tharam Dillon, Room: Casino Royale 金雕阁]

Title: Sailing the Information Ocean with Awareness of Currents: Discovery and Application of Source Dependence (1hr).

14:30-  
17:00

**Speaker: Xin Dong, AT&T Labs Research.**

Title: The Resource Space Model (1hr).

**Speaker: Hai Zhuge, Chinese Academy of Sciences.**

19:00-  
20:30

**Welcome Reception**

[ Restaurant: Restaurant 绿云阁]

**Tuesday** (Oct.13)

(20 min / per R, 15 min / per S)

9:30-

**Opening Session**

10:30

[Chair: Hai Zhuge, Room: Crystal Palace 丽晶宫]

10:30-

**Keynotes:** Data Management Infrastructure for the Mobile Web

11:30

Prof. Christian S. Jensen, Aalborg University, Denmark

12:00-

Lunch

13:30

[Restaurant: Restaurant 绿云阁]

14:00-

Session 1: Semantics, Knowledge and Service

15:45

[Chair: Carl Taswell, Room: Crystal Palace 丽晶宫]

- R Knowledge Engineering for Pharmacogenomic Molecular Imaging of the Brain  
Carl Taswell
- R User-Centered QoS in Combining Web Services for Interactive Domain  
Arif Bramantoro, Toru Ishida et al
- R An Intelligent Architecture for Distributed Data and Knowledge Management in a  
Network-Centric Organization  
Sahar Saberi, Mehdi N. Fesharaki
- S Using Resource Space Model for Managing Nested Table  
Zhurong Zhou, Yan Tang, Hai Li, Yuhui Qiu
- S Connecting Ontologies: Semantic Carrier of Requirements for Networked Software  
Bin Wen, Keqing He, Jian Wang

**14:00-** Session 2: Semantics and Resource Management

**15:45** [Chair: Bruce Spencer, Room: Casino Royale 金雕阁]

- R SMU: Towards Cloud Oriented Service MashUp  
Xia Xie, Ke Fan, Xuanhua Shi, Song Wu, Hai Jin
- R A Temporal Relevant Logic Approach to Modeling and Reasoning about Epistemic Processes  
Jingde Cheng
- R Health Training with SAVOIR and the RSM  
Bruce Spencer, Bryan Copeland, Yosri Harzallah, Justin Hickey, Sandy Liu
- S Classifier-guided topical crawler: A novel method of automatically labeling the positive URLs  
CHEN Li, LI Zhi-shu, YU Zhong-hua, HAN Guo-hui
- S Research on Core Business Process-based Knowledge Process Model  
ZHENG Xiao-dong, HU Han-hui, GU Hong-rui

**14:00-** Session 3: Knowledge and Semantic Networking

**15:45** [Chair: Wenyin Liu, Room: Golden Harps 银曲阁]

- R Multi-range Fusion Technique Using Multi-Channel Monitoring SST  
Lingyu Xu, Pinggen Zhang, Xiaojun Fang, Guijun Han, Dongfeng Xu, Xiangfeng Luo
- R Latent Link Analysis for Expert Finding in User-Interactive Question Answering Services  
Yao Lu, Xiaojun Quan, Xingliang Ni, Wenyin Liu, Yinlong Xu
- S A Sustainable knowledge repository for decision support in Climate Change Adaptation  
Shah J. Miah, John G. Gammack
- S Binding Abstract Business Process and Actual Web Services Using Finite State Automata  
Kun Gao, Lifeng Xi, Qin Wang
- S Semantic Link Network Portal for Multimedia Content Recommendation  
Jike Ge, Zuqin Chen, Yuhui Qiu

**15:45-** Coffee Break

**16:15**

**16:15-** Session 4: Semantics and Semantic Grid

**17:00** [Chair: Shengli Wu, Room: Crystal Palace 丽晶宫]

- R The Cubic Regression Model for Merging Results from Multiple Text Databases  
Shengli Wu, Yaxin Bi, Jun Liu
- R Multi-Agent Based Bioinformatics Integration Using Distributed Dynamic Description Logics  
Zhuxiao Wang, Dapeng Zhang, Zhongzhi Shi
- R Deploying Resource Space Model on A Structured P2P Network  
Xue Chen, JunFeng Zhang, WeiMin Xu, XiangFeng Luo
- S On-demand Data Service for the Next Generation Spatial Data Infrastructure  
Zhen-Chun Huang
- S Semantic Message Link Based Service Set Mining for Service Composition  
Anping Zhao, Xiaoyong Wang, Ke Ren, Yuhui Qiu

**16:15-** Session 5: Semantics, Uncertainty and Algorithm  
**18:00** [Chair: Zhixing Huang, Room: Casino Royale 金雕阁]

- R Inducing Uncertain Decision Tree via Cloud Model  
Tao WU, Kun QIN
- R A Novel Approach for Measuring Chinese Terms Semantic Similarity based on Pairwise Sequence Alignment  
Shuo Xu, Li-jun Zhu, Xiao-dong Qiao, Cun-xiang Xue
- R An encrypt and decrypt algorithm implementation on FPGAs  
Ke Wang
- S Integration of Computational and Crowd-Sourcing Methods for Ontology Extraction  
Huairan Lin, Joseph Davis, Ying Zhou
- S Privacy Preserving Classification Algorithm Based Random Diffusion Map  
Lu Wei

**16:15-** Session 6: Semantics and Knowledge Grid  
**18:00** [Chair: Tharam Dillon, Room: Golden Harps 银曲阁]

- R Protocol Compatibility Verification for Web Services Interaction  
Yanping Yang , Mingan Zhang, Xiqing Ye, Houwu Chen, Xinke Lian
- R Chinese Text Classification using Key Characters String Kernel  
Shiqiang Zheng, Yujiu Yang, Haiping Wu, Wenhuan Liu
- R An Ontology-based Webpage Classification Approach for the Knowledge Grid Environment  
Hai Dong, Farookh Khadeer Hussain, Elizabeth Chang
- S A Research on The Training Mode of University Administer  
li xiaohua, zhao jianhua
- S Semantic Cloud based on SLN and ALN  
Fangfang Liu, Xiangfeng Luo, Jie Yu, and Guoning Liang

**19:00-** **Conference Banquet**  
**21:00** [Restaurant: Crystal Palace 水晶宫]

**Wednesday (Oct.14)**  
(20 min / per R, 15 min / per S)

<b>9:00-10:00</b>	<b>Keynotes:</b> [Chair Tharam Dillon, Room: Crystal Palace 丽晶宫] Cloud Data Management Systems: Opportunities and Challenges Prof. Beng Chin OOI , National University of Singapore
<b>10:00-10:20</b>	Coffee Break
<b>10:20-12:00</b>	Panel Talk and Discussion [Chair Qing Li, Room: Crystal Palace 丽晶宫] Title: Dataspace: the Next-generation Self-configuring Data Integration Framework. Speaker: <i>Xin Dong, AT&amp;T Labs Research.</i> Title: The Web of Things and Cyber Physical Systems as the new Frontier for the Future Interconnection Environment Speaker: <i>Prof. Tharam Dillon, Curtin University of Technology, Australia</i> Title: Interactive Semantics. Speaker: <i>Hai Zhuge, Chinese Academy of Sciences.</i>
<b>12:00-13:30</b>	Lunch [Restaurant: 绿云阁]
<b>14:00-15:45</b>	Session 7: Knowledge and Knowledge Grid [Chair: Peter Brezany, Room: Crystal Palace 丽晶宫 ]
R	Cloud-Enabled Scalable Decision Tree Construction Yuzhang Han, Peter Brezany, Ivan Janciak
R	Manage Mobile Data With Meta-Data Ontologies: A Decentralized Grid Approach Bin Peng, Yong Zhu, Rongliang Luo
R	Research on Policy Conflict Based on Layered Policy Representation Framework Hu Jun; SUN Ye; WANG Bai-yun
S	Developing Reliable Web Services using Independent Replicas Chaogang Tang, Qing Li, Bei Hua, An Liu
S	Double Bits Error Correction Using CRC Method Shahram Babaie, Ahmad Khadem Zadeh, Seyed Hasan Es-hagi, Nima Jafari Navimipour
<b>14:00-15:45</b>	Session 8: Knowledge and Resource Management [Chair: Hai Zhuge, Room: Casino Royale 金雕阁]
R	Complementary Relations and Their Concept Lattices in Relational Databases Yuxia Lei, Yuefei Sui, Cungen Cao
R	The Logical Operations on Relations, Scales and Concept Lattices Yuxia Lei, Yuefei Sui, Cungen Cao
R	Exploring Personal CoreSpace for DataSpace Management Yukun Li, Xiaofeng Meng
S	Research on Literature Retrieval Based on Concepts Similarity yang xiquan, guo dina, yan liping, chen xin
S	Multi-dimensional Queries in DHT-based Peer-to-Peer Systems Xinpeng Shen, Zhanhuai Li

<b>14:00-15:45</b>	<p>Session 9: Semantics, Service and Grid  [Chair: Xin Dong, Room: Golden Harps 银曲阁]</p>
R	Selectivity Estimation of Correlated Properties in RDF Data for SPARQL Query Optimization Bin Lv, Xiaoyong Du, Yan Wang
R	An Adaptive Scheduling Mechanism for Elastic Grid Computing Lei Nie, Zhiwei Xu
R	Context-based Web Service Clustering Rong Zhang, Koji Zettsu, Takafumi Nakanishi, Yutaka Kidawara, Yasushi Kiyoki
S	Random Access Algorithm of LTE TDD System Based on Frequency Domain Detection Chen Yu, Wen Xiangming, Zheng Wei, Lin Xinqi
S	Text Information Retrieval Based on Concept Semantic Similarity Gang Lv, Cheng Zheng, Li Zhang
<b>15:45-16:15</b>	Coffee Break
<b>16:15-17:40</b>	<p>Session 10: Workflow, Semantics and Grid  [Chair: Qing Li, Room: Crystal Palace 丽晶宫]</p>
R	A Visual Modeling Framework of Workflow Systems Based on CCS Zhao, Qing Li, Farong Zhong
R	Enhancing Grid Service Discovery with a Semantic Wiki and the Concept Matching Approach Tao Guan, David Fowler, Ayomi Bandara, Ed Zaluska, David De Roure, Richard Crowder, Gary Wills
S	SSIS: Ontology-based Analyzing and Reasoning of the Shanghai World Expo Knowledge Yu Yan, Zhao Lu, Fang Wu, JunZhong Gu
S	A Chinese Classifier Research for Query Intention and Non-Query Intention Wu Xiaohui, George Allan, Song Pingping, Zhang Rongxin
S	Research on the application of Semantic Ontology in Spatial Information Grid Sheng-tao Sun, Ding-sheng Liu, Guo-qing Li, Wen-yang Yu
<b>16:15-17:30</b>	<p>Session 11: Semantics and Semantic Grid  [Chair: Zhangbing Zhou, Room: Casino Royale 金雕阁]</p>
R	An Approach to Validating Transactional Properties of WS-BPEL Composition Shi-Ting Wen, Qing Li, Lihua Yue, An Liu
R	Assessing Service Protocols Adaptability Using Protocol Reduction and Graph-Search with Backtracking Techniques Zhangbing Zhou, Sami Bhiri, Hai Zhuge, Manfred Hauswirth
S	Research on the Application of RGPS Domain-based Requirements Elicitation and Analysis for Web Service Discovery Bo Hu, Keqing He, Huafeng Chen, Jian Wang
S	SOA-Enabled Health Information Integration Platform (HIIP): A Case Study Haiyan Chen, Shigang Qin, Jianxun Liu, Jian Cao

**16:15-**

Session 12: Semantic Link Network and Knowledge Sharing

**17:30**

[Chair: William Wei Song, Room: Golden Harps 银曲阁]

- R The Basic Operation Set of the Semantic Link Network and Its Completeness  
B. Xu, H. Zhuge
- R An Analysis Model for Knowledge Grid and Flows  
William Wei Song and Joe Geldart
- S A Framework for Developing E-Learning Solutions  
K.S. Cheung, J. Lam
- S Estimation of Covering number in learning theory  
Jianjun Wang, Hua Huang, Zhangtao Luo, Baili Chen

The Internet and World Wide Web are milestones of information sharing. IT professionals are in the critical historical stage of creating the new brilliance-a new interconnection environment. Semantics and knowledge are the basis of this environment. The International Conference on Semantics, Knowledge and Grid (SKG) is the unique cross-area international forum on semantic computing, knowledge networking, and grid computing.

The 5<sup>th</sup> International Conference on Semantics, Knowledge and Grid (SKG2009) is to bring together researchers and practitioners in areas of knowledge and intelligence, semantics, and grid computing to share their visions, research achievements and solutions to real applications, to resolve the challenge issues and to establish worldwide cooperative research and development. SKG2009 will be held in Zhuhai, a city with natural beauty and historical treasures, located in the Guangdong province, southeast of China.

Themes(include but not limited to)

- Semantics and Semantic Grid
- Knowledge and Knowledge Grid
- Advanced Networking Model
- Systems, Tools and Applications
- e-Culture and e-Science

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