

# The 15<sup>th</sup> International Symposium on Knowledge and Systems Sciences

Since 2000



Academy of Mathematics and Systems Science  
Chinese Academy of Sciences

November 1-2, 2014

Hokkaido University



International Society for Knowledge  
and Systems Sciences, Since 2003

## *Keynote Speeches*

**NOV 1, 9:30-10:40,**

**Prof. Shouyang WANG (Chinese Academy of Sciences, CHINA)**

**Title:** *Knowledge Management in Economic Forecasting*



**NOV 1, 10:50-12:00**

**Prof. Rossi SETCHI (Cardiff University, UK)**

**Title:** *Computational Semantics in Knowledge Engineering*



**NOV 2, 9:20-10:30,**

**Prof. Kyoichi KIJIMA (Tokyo Institute of Technology, JAPAN)**

**Title:** *Service Ecosystems Innovation in Multi-level Adaptive Cycles Model Perspective*



Forerunner of this society in 1990s:

UK-China-Japan Workshop on Systems Methodology

– Cross-Cultural Learning and Integration –

Room A					Room B				
08:30-09:10		Registration							
09:20-09:30		Opening of the KSS 2014							
09:30-10:40	Chair: Yoshiteru Nakamori	Keynote 1	Shouyang Wang	Knowledge Management in Economic Forecasting					
10:40-10:50		Break							
10:50-12:00	Chair: WB Lee	Keynote 2	Rossi Setchi	Computational Semantics in Knowledge Engineering					
12:00-13:00		Lunch Break							
13:00-15:00	Chair: Wen Zhang	Knowledge Management			12:40-13:40	Board Meeting			
		Presen 01	Yasuo Sasaki*	Systems Intelligence in Knowledge Management Implementation: A Momentum of the SECI Model					
		Presen 02	Zili Feng* Lingling Zhang Xinxin Gao Qing Zhao	Economic News Knowledge Management System Framework Design for Xinhua News Agency	13:40-15:00	Chair: Jian Chen	Service Systems		
		Presen 03	Xilin Yang* Yanzhong Dang Yongsheng Qian Deqiang Hu Xin Yue	Research on Affection and Its Impact on Interpersonal Knowledge Interaction Based on Computational Experiment		Presen 07	Yan Lin* Jian Chen	Is their knowledge valuable to bring us newness? Effects of using automakers' knowledge in parts suppliers' inventions	
		Presen 04	Qiuyan Zhong* Huifang Hue Huimei Dong	Research on Response Implementation Process Generation of Unconventional Emergency		Presen 08	Kazuhiko Goda* Kyoichi Kijima	Servitization of Machine-Tool Trading Company to Value Orchestration Platform: Japanese Integral Modular Strategies in Quality Control Perspective	
		Presen 05	Shuangling Luo* Yanzhang Wang	Reconciling the Dual Dynamics of Meme Spreading and Opinion Evolution in Social Media		Presen 09	Yuting Chen* Weihua Cui Xian Yang Guangfei Yang	Deriving Consumer Behavior Differences between China and America by Mining Consumer Reviews	
		Presen 06	Jessica Y.T. Yip* Rongbin W.B. Lee	Responding to Institutional Complexity: An Evaluative Inquiry Approach for Business Strategy Formulation		Presen 10	Xiaoning Lv Xuezhi Qin*	Impact of the Deposit Insurance on Deposit Removal among Banks	
15:00-15:30		Coffee Break			15:00-15:30		Coffee Break		
15:30-17:30	Chair: Tiejue Ma	Decision Analysis			15:30-17:30	Chair: Xijin Tang	Data Management		
		Presen 11	Tiejue Ma*	Comparing Countries'/Areas' Productive Knowledge with International Trade Data		Presen 17	Zhenpeng Li Xijin Tang*	Triadic and M-cycles Balance in Social Network	
		Presen 12	Hongbin Yan* Tiejue Ma	A Group Uncertain QFD Model based on Fuzzy Majority		Presen 18	Wen Zhang* Lean Yu Xijin Tang Takotoshi Yoshida	Feature Weighted Confidence to Incorporate Prior Knowledge with Support Vector Machines for Text Classification	
		Presen 13	Han Qiao* Yifan Yang Jian Ma Zhiwei Wang Hongxing Wang	A Game Theory Framework to Analyze Mechanism of Science & Technology Secret-level Setting Policy in China		Presen 19	Jiangnan Qiu* Guangyuan Wang Kuo Zhang	Research on Semantic Transitivity Laws Based on Association Analysis in Objective Knowledge System	
		Presen 14	Kota Ito* Norimasa Kobayashi Kyoichi Kijima	A Game-Theoretical Formulation of the Simplest Social Norms with Procedural Utility		Presen 20	Guangfei Yang* Jian Huang Weihua Cui1 Lian Lian	PM2.5 Forecast Based on Symbolic Regression in Dalian, China	
		Presen 15	Yasunori Kojima* Norimasa Kobayashi Kyoichi Kijima	Research on Solution Concept of Extensive Hypergame		Presen 21	Jindong Chen Xijin Tang*	Societal Risk Classification of Post Based on Paragraph Vector and KNN Method	
		Presen 16	Yu Yu Qinfen Shi* Weiwei Zhu Jie Wu Qian Wang	Modeling Knowledge Flow Based on Knowledge Life Cycle: A Colored Petri Net Approach		Presen 22	Daniel Ching Wa Ng*	A Conjecture of Applying Random Matrix Theory (RMT) to Social Big Data Set in High Dimensionality	
18:30-20:30	Banquet at Sapporo Aspen Hotel								

Room A					Room B				
09:20-10:30	Chair: Jiangning Wu	Keynote 3	Kyoichi Kijima	Service Ecosystems Innovation in Multi-level Adaptive Cycles Model Perspective					
10:30-10:40		Break							
10:40-12:00	Chair: Haixiang Xia	Information/Knowledge Strategy			10:40-12:00	Chair: T. Yoshida	Socio-Technical Systems		
		Presen 23	Haixiang Xia* Aiguo Zheng	An Information Diffusion Model Based on Complex Contagion			Presen 27	Jifa Gu*	Research on a Practical System Approach - "Mo" Approach
		Presen 24	Jiangning Wu* Xiaotong Shi Donghua Pan	Computational Modeling of Process of Transactive Memory Formation in Work Teams			Presen 28	Ayako Sawada* Taketoshi Yoshida	The Use of Regional Historical Materials and CGM for the Expansion of Inbound Tourism
		Presen 25	Hiroshi Naruse* Michitaka Kosaka	A Proposal of Service Value Model in the Technology Intelligence Activities - A Case Study of Technology Strategy Formulation in the IT Company –			Presen 29	Xuehua Wang* Yue Ge Wenjun Zhou	Construction and Analysis of Derived Hazard Network of Typhoon
		Presen 26	Aolin Leng* Ju'e Guo Nanyan Dong Guangyuan Xing	The More Financial Knowledge the More Stock Investment Return? - Empirical Evidences from Chinese Individual Investors			Presen 30	Lili Rong* Zijun Qie	A Systematic Study on the Construction of Complex Disaster Scenarios
12:00-13:00		Lunch Break			12:00-13:00		Lunch Break		
13:00-14:20	Chair: Xijin Tang	Knowledge Science			13:00-14:20	Chair: Lili Rong	Service Science		
		Presen 19	Bin Shen* Xingsen Li	IBEST@SEE Methodology and Its Applications in Big Data Assisted Scientific Discovery			Presen 35	Jing Wang Lili Rong* Mingzheng Wang	Method of Constructing Universal Template of Emergency Response Oriented Disaster Theme
		Presen 32	Jing Sun* Yoshiteru Nakamori	Knowledge Creation Strategies for Graduate Researches			Presen 36	Yijun Liu* Qianqian Li	Superlink Prediction and its Application in the Super Network of Public Opinion
		Presen 33	Yongliang Zhao Xijin Tang*	In-depth Analysis of Online Hot Discussion about TCM			Presen 37	Wentao Guo* Van Nam Huynh Michitaka Kosaka Yoshiteru Nakamori	Evaluation of Service Based on Proportional Fuzzy Linguistic Distribution Model
		Presen 34	Narongsak Pongsathornwiwat* Van Nam Huynh Thanaruk Theeramunkong Chawalit Jeenanunta Yoshiteru Nakamori	A Hybrid Approach to Linguistic Multi-Expert Multi-Attribute Decision-Making Problem			Presen 38	Weihua Cui Xian Yang Guangfei Yang* Chonghui Guo	The Word-of-mouth Ranking Method Based On Chinese Customer Reviews

*The 15th International Symposium on Knowledge and Systems Sciences  
Hokkaido University, November 1-2, 2014, Sapporo, Japan*

*Pre-Symposium, October 31, 2014  
Knowledge Synthesis and Justification*

*Post-symposium, November 3, 2014  
Meta-synthesis and Complex Systems*

