

The Seventh International Symposium on Operations

Research and its Applications

(ISORA 2008)

(Jointly organized by ORSC & ORSJ)

Program

Local Organizer



Sponsors



October 31-November 2, 2008

Lijiang Yunnan, China

ISORA'2008

Programs

The 7th International Symposium on Operations Research and Its Applications
Oct 31-Nov 2, 2008, Lijiang, China

October 30 (Thursday):

17:00-21:30 Participants arrival in Lijiang, check in Lijiang Guanfang Villa Hotel, and Registration package pick up. (Hotel Lobby)

October 31 (Friday): Technical sessions.

8:00-8:30 Registration for late arrivals

8:30-8:40 Opening Session

8:40-10:00 Plenary Session ISORA-PI (Session Chair: Xiang-Sun Zhang): Juxian Tang

8:40-9:30 “*Problem Solving by General Purpose Solvers*”, Toshihide Ibaraki, Kwansai Gakuin University, Japan

9:30-10:20 “*max-min nonlinear optimization*”, Shu-Cherng Fang, North Carolina State University, USA

10:20-10:40 Coffee Break

10:40-12:20 Plenary Session ISORA-PII (Session Chair: Tatsuo Oyama): Juxian Tang

10:40-11:30 “*Development of a decision support tool for supply network planning: A case study from the chemical industry*” Hans-Otto Guenther, Technical University Berlin, Germany

11:30-12:20 “*Optimal control policy for stochastic inventory systems with multiple types of returns*”, Xiuli Chao, Michigan University, USA

12:30-13:30 Lunch break

13:30-15:10 Parallel Session ISORA-A1 (Session Chair: Prof. Wuyi Yue): Juxian Tang

13:30-13:55 “*Retrial queues with limited number of retrials: Numerical Investigations*” Yang Woo Shin, Dug-Hee Moon, Changwon National University, Korea

13:55-14:20 “*A Dynamic Lot Size Model for Seasonal Products with Shipment Scheduling*”, Hiroyuki Wakinaga, Katsushige Sawaki, Nanzan University, Japan

14:20-14:45 “*Design and Implementation of a Network Emulator using Virtual Network Stack*” Kunio Goto, Yusuke Sugiyama, Nanzan University, Japan

14:45-15:10 “*Traffic jamming in disordered flow distribution network*”, Bing Wang, ERATO Aihara Complexity Modeling Project, JST, Japan

13:30-15:10 Parallel Session ISORA-B1 (Session Chair: Prof. Masanori Fushimi) Lijiang Yuan

13:30-13:55 “*Quadratic Programming for the Vehicle Routing Problem*”, Ping Ji, Hongtao Wu,

Hong Kong Polytechnic University, Hong Kong

13:55-14:20 "A primal-dual interior-point filter method for nonlinear semidefinite programming",

Zhongyi Liu, Wenyu Sun, Hohai University, China

14:20-14:45 "Heuristic Algorithms for the Fixed-Charge Multiple Knapsack Problem", **Takeo**

Yamada, Byungjun YOU, National Defense Academy, Japan

14:45-15:10 "A Note on Mixed Set Programming", **Jianyang Zhou**, ENGINEST, France

15:10-15:30 Coffee Break

15:30-17:10 Plenary Session ISORA-PIII (Session Chair: Xiuli Chao): Juxian Tang

15:30-16:20 "Bioinformatics, recent problems and results", **Xiang-Sun Zhang**, Chinese Academy of Sciences, P.R China

16:20-17:10 "The Valuation of Callable Financial Commodities with Two Stopping Boundaries", **Katsushige Sawaki**, Atsuo Suzuki and Kyoko Yagi, Nanzan University, Japan

18:00-19:00 -Welcome reception at Guanfang Hotel

19:00-21:00 Ethnic Songs and Dance performance (bus leave at 19:00).

November 1 (Saturday) Technical Sessions

8:00-9:40 Parallel Session ISORA-A2 (Session Chair: Prof. Degang Liu): Juxian Tang

8:00-8:25 "Analysis of a Machine Repair System with Warm Spares and N-Policy Vacations", **Dequan Yue**, Wuyi Yue, Hongjuan Qi, Yanshan University, China

8:25-8:50 "Analysis of a Geom/G/1 Queue with General Limited Service and MAVs", **Wuyi Yue**, Zhanyou Ma, Naishuo Tian, Konan University, Japan

8:50-9:15 "IMAP and Tandem Networks", **Zhaotong Lian**, Xiaoming Liu, Ning Zhao, Liming Liu, University of Macau, Macau

9:15-9:40 "The monitoring of the network traffic based on Queuing Theory", **Jianping Wang**, Henan College of Technology.

8:00-9:40 Parallel Session ISORA-A3 (Session chair: Prof. Masanori Horio): Xianyun Ge

8:00-8:25 "Districting Problem for Several Emergency Service Units and Evaluation of Districts" **Keisuke Inakawa**, Atsuo Suzuki, Nanzan University, Japan

8:25-8:50 "A Tabu Search Based Algorithm for Cargo Loading Problem", **Li PAN**, Joshua Huang, Sydney Chu, The University of Hong Kong, Hong Kong

8:50-9:15 "A Continuous-time Inventory Model with Procurement from Spot Market", **Kimitoshi Sato**, Katsushige Sawaki, Nanzan University, Japan.

9:15-9:40 "Coordinating Multi-Period Capacity Allocation and Order Scheduling via Optimization and Simulation", **Shao-Ju Lee**, Ming-Hsuan Li, National Dong Hwa University, Taiwan

8:00-9:40 Parallel Session ISORA-B3 (Session Chair: Prof. Wangsen Feng): Lijiang Yuan

8:00-8:25 "Computing Lower Bounds for Steiner Trees in Road Network Design ". **Justus Schwartz**, Juerg Stueckelberger, ETH Zurich, Switzerland

8:25-8:50 "Determining Arc segment significance in two idealized road networks" **Mingzhe Li**,

Justin Yates, Fukuoka University, Japan

8:50-9:15 “*The Equilibrium Equivalent Representation for Variational Inequalities Problems with Its Application in Mixed Traffic Flows*”, **Baibai Fu**, Ziyou Gao, Beijing Jiaotong University, China

9:15-9:40 “*Scheduling jobs on a single machine with inventory operations*”, **Baoqiang Fan**, Guochun Tang and Shuxia Zhang, Ludong University, China

9:40-10:00 Coffee Break

10:00-11:15 Parallel Session ISORA-B2 (Session Chair: Prof. Kunio Goto) Juxian Tang

10:00-10:50 “*Approximation Algorithm of Minimizing Makespan in Parallel Bounded Batch Scheduling*”, **Yuzhong Zhang**, Qingguo Bai, Jianfeng Ren, Qufu Normal University, China

10:25-10:50 “*Application to a University Course Timetabling Problem by a General Project Scheduler*”, **Masanori Horio**, Atsuo Suzuki, Nagoya University of Arts and Science, Japan

10:50-11:15 “*A randomized distributed algorithm for total scheduling*”, **Lan Xiao**, Guiying Yan, Wei Ren, Academy of Mathematics and Systems Science, Chinese Academy of Sciences, China

10:00-11:40 Parallel Session ISORA-A4 (Session Chair: Dr. Shao-ju Lee): Xianyun Ge

10:00-10:25 “*Improving Supplier's Performance Using Common Replenishment Epochs in a Vendor-Managed Inventory System*”, **Juhwen Hwang**, Su-Hwa Wu, Yu-Yen Huang, National Dong Hwa University, Taiwan

10:25-11:50 “*A Purchasing Decision Support System for a Rental Company*”, **Ruohui Yang**, Peter Cowling, Keshav Dahal, Victoria Horsfield, University of Bradford, UK

11:50-12:15 “*A hybrid metaheuristic for the lot streaming problem in job shops*”, **Liji Shen**, Udo Bucher, Technische Universitaet Dresden, Germany

11:15-11:40 “*The application of fuzzy programming to the aggregate production planning-markdown pricing problem*”, **Wenyun Zhu**, City University of Hong Kong, Hong Kong

10:00-11:40 Parallel Session ISORA-B4 (Session Chair: Dr. Ping Ji): Lijiang Yuan

10:00-10:25 “*Optimal Configurations of Cell Automata to Generate Test Stimuli for VLSI*”, **Masanori Fushimi**, Tohru Hadano, Nanzan University, Japan

10:25-10:50 “*An Arbitrary Starting Simplicial Algorithm for Constructively Proving Tarski's Fixed Point Theorem on an n-dimensional Box*”, **Chuangyin Dang**, The University of Hong Kong, Hong Kong

10:50-11:15 “*A Perturbation-Guided Oscillation Strategy for the Multidimensional Knapsack Problem with Generalized Upper Bound Constraints*”, **Vincent Li**, National Dong Hua University, Taiwan

11:15-11:40 “*Global Optimality Conditions for some Classes of Optimization Problems*”, **Zhiyou Wu**, University of Karlsruhe, Germany

12:00-13:30 Lunch break

13:30-15:10 Parallel Session ISORA-A5 (Session Chair: Dr. Jianyang Zhou) Xianyun Ge

13:30-13:55 "Australian Dollars Exchange Rate and Gold Prices: An Interval Method Analysis".

Ai Han, Shanying Xu, Shouyang Wang, Academy of Mathematics and Systems Sciences, CAS, China

13:55-14:20 "A Cointegration Analysis of the Relationships among Tax Revenue and Macroeconomic Factors in China", **Mengyao Zhang**, Jinchuan Cui, Academy of Sciences, China

14:20-14:45 "A Method of Designing Energy Tax Rate Based On Game Theory", **Ying Li**, Jinchuan Cui, Institute of Applied Mathematics, CAS, China

14:45-15:10 "A Survey on Applications of OR Techniques in Japan", **SONG, Yu** Fukuoka Institute of Technology, Japan

13:30-15:10 Parallel Session ISORA-B5 (Session Chair: Prof. Zhiyou Wu) Lijiang Yuan

13:30-13:55 "Approximate maximum edge coloring within factor 2: a further analysis" **Wangsen**

Feng, Ping Chen, Bei Zhang, Peking University, China

13:55-14:20 "Acyclic Edge Colorings of Planar Graphs without Short Cycles", **Jian-liang Wu**, Xiang-yong Sun, Shandong University, China

14:20-14:45 "Improved Model and Algorithm for Determining Correlation of Trend Sequences", **Yin Chen**, South China Agriculture University, China

14:45-15:10 "Reputation-based Contents Crawling in Digital Archiving System", **Hiroyuki Kawano**, Nanzan University

15:10-15:30 Coffee Break

15:30-17:35 Parallel Session ISORA-A6 (Session Chair: Prof. Sydney C.K Chu) Xianyun Ge

15:30-15:55 "GIS-based Solution of Vehicle Scheduling and Routing Problems in Day-care Center", **Hiroyuki Kawano**, Masahiro Kokai, Wuyi Yue, Nanzan University, Japan

15:55-16:20 "Risk Analysis and Improvement Strategy on Measuring the Robustness of Tokyo Water Supply Network System", **Fithriyah**, Hiroshi Ashida, Hozumi Morohosi, Tatsuo Oyama, National Graduate Institute for Policy Studies, Japan

16:20-16:45 "Medical Treatment Capability Analysis using Queuing Theory in a Biochemical Terrorist Attack", **Hua Yu**, Graduate University of Chinese Academy of Sciences, China

16:45-17:10 "A case study of optimal ambulance location problem", **Hozumi Morohosi**, National Graduate Institute of Policy Studies, Japan

17:10-17:35 "Resources Allocation Problem for Local Reserve Depots in Disaster Management Based on Scenario Analysis". **Jianming Zhu**, Jun Huang, Degang Liu, Jiye Han, Graduate University of Chinese Academy of Sciences, China

15:30-17:35 Parallel Session ISORA-B6 (Session Chair: Prof. Hans Otto Guenther) Lijiang Yuan

15:30-15:55 "A Brief History of Military Operations Research in China's People's Liberation Army ". **Charles Hawkins**, Ye Yang, Historical Evaluation and Research Organization,

USA

13:55-16:20 “*Selecting Journals to Stop Subscription in University Library by OR/MS Approach*”

Atsuo Suzuki, Masanori Fushimi, Masaki, Nishio, Nanzan University, Japan

16:20-16:45”*Network optimization on empty container problem*”, **Liuhuan Dong**, ILOG
Shanghai, China

16:45-17:10 “*A game theoretic approach to an analysis of a soccer game*”, **Nobuyoshi Hirotsu**,
Juntendo University, Japan

17:10-17:35 “*Disjoint Multi-linear Optimization in Imprecise Decision Analysis*”, **Xiaosong Ding**,
Jihong zhang, Beijing Foreign Study University, China

18:00-20:00 Banquet

November 2 (Sunday) One-day excursion to the Jade Dragon Mountain National Park

8:00 Departure at hotel

17:30-18:00 Back to Hotel

18:00-20:30 Dinner at local restaurant

November 3 Check out and back home.

*The above program subjects to revision based on further information and Ad Hoc presentation requests.