

ISS 2017 Program at a Glance

Friday, June 23	
12:30–	Registration
13:15–13:30	Opening Session
13:40–15:20	Technical Session 1A: Supply Chain and Optimization (organized session) Technical Session 1B: Mixed Integer Programming
15:20–15:45	Coffee Break
15:45–16:45	Keynote Speech 1 (Andreas T. Ernst)
16:45–16:55	Break
16:55–18:10	Technical Session 2A: Routing, Allocation and Relocation Technical Session 2B: Evolutionary Computing and Metaheuristics
Saturday, June 24	
9:00–	Registration
9:30–10:45	Technical Session 3A: Humanitarian Logistics and Emergency Management (organized session) Technical Session 3B: Manufacturing
10:45–11:10	Coffee Break
11:10–12:10	Keynote Speech 2 (Silvano Martello)
12:10–13:40	Lunch
13:40–14:55	Technical Session 4A: Online Scheduling Technical Session 4B: Stochastic Programming
14:55–15:20	Coffee Break
15:20–17:00	Technical Session 5A: Scheduling and Urban Operations Research (1) (organized session) Technical Session 5B: Production Management and Scheduling
18:30–	Banquet
Sunday, June 25	
9:00–	Registration
9:30–10:20	Technical Session 6A: Maintenance Scheduling Technical Session 6B: Staff Scheduling
10:20–10:45	Coffee Break
10:45–11:45	Invited Talk (Yoshiyuki Karuno)
11:45–13:15	Lunch
13:15–14:55	Technical Session 7A: Scheduling and Urban Operations Research (2) (organized session) Technical Session 7B: Logistics and Supply Chain Management
14:55–15:05	Closing Session

Program

Friday, June 23

12:30–

Registration

13:15–13:30

Opening Session

13:40–15:20

Technical Session 1A: Supply Chain and Optimization (organized session)

Organizers: Mikio Kubo, Kazuhiro Kobayashi and Hideki Hashimoto

1A1: Rolling stock rostering optimization with different types of train-sets

Susumu Morito, Naoto Fukumura, Takayuki Shiina and Jun Imaizumi

1A2: An empirical study on the matching relationships between supply chain strategies and supply chain systems

Jian Wang, Zhixin Chen and Zhongsheng Wu

1A3: A robust guaranteed-service model to deal with uncertain lead time in general acyclic supply chains

Pablo Beirán, Maria Pilar Martin-Romero and Hiroaki Matsukawa

1A4: Voting collective intelligence model for demand forecast

Akihiro Nakatsuka, Shota Asami and Hiroaki Matsukawa

Technical Session 1B: Mixed Integer Programming

1B1: Modeling and analysis with real-world data for global production planning and location of automobile assembly plants

Kie Funahashi, Wei Wu, Yannan Hu, Hiromichi Goko, Mihiro Sasaki and Mutsunori Yagiura

1B2: The dial-a-ride problem with regret minimization

Makoto Miyaoka, Noriyoshi Sukegawa and Takao Asano

1B3: An assignment- and sequencing-based mixed-integer linear programming formulation for the resource-constrained project scheduling problem

Tom Rihm and Norbert Trautmann

1B4: Minimizing operational costs of assessment centers

Tom Rihm

15:20–15:45

Coffee Break

15:45–16:45

Keynote Speech

K1: Matheuristics for Scheduling Problems

Andreas T. Ernst

16:45–16:55

Break

16:55–18:10

Technical Session 2A: Routing, Allocation and Relocation

2A1: Routing of carrier-vehicle systems with dedicated last-stretch delivery vehicle
Mohd Shahrizan Bin Othman, Aleksandar Shurbevski and Hiroshi Nagamochi

2A2: New algorithms for the yard space allocation problem with a time dimension
Tiantian Wang, Hong Ma and Zhou Xu

2A3: An exact algorithm for the unrestricted block relocation problem with duplicate priorities
Shunji Tanaka and Fumitaka Mizuno

Technical Session 2B: Evolutionary Computing and Metaheuristics

2B1: Scheduling method for production process with crane conveyance using GA with diversification generator

Takashi Tanizaki, Hedeaki Katagiri, Masahiro Aoe and Hiroyuki Miyai

2B2: Synchronizing vehicle routing and sequencing at a cross-docking terminal
Ting-Don Cheng and Ching-Jung Ting

2B3: Efficient implementations of an iterated local search algorithm for the multi-vehicle covering tour problem

Yuta Takeuchi, Yosuke Takada, Yannan Hu, Hideki Hashimoto and Mutsunori Yagiura

Saturday, June 24

9:00–

Registration

9:30–10:45

Technical Session 3A: Humanitarian Logistics and Emergency Management (organized session)

Organizers: Mikio Kubo, Kazuhiro Kobayashi and Hideki Hashimoto

3A1: Temporary logistics hub selection using multi-objective optimization for disaster response
Rajali Maharjan and Shinya Hanaoka

3A2: Using simulation to examine operational efficiency enhancement in a hospital emergency room through adoption of a fast service track

Yong-Hong Kuo, Janny M.Y. Leung, Colin A. Graham, Kelvin K.F. Tsoi and Helen M. Meng

3A3: Multi-period shelter selection and relocation considering dynamic hazard assessment
Meilinda F.N. Maghfiroh and Shinya Hanaoka

Technical Session 3B: Manufacturing

3B1: B-code generation for a CNC dentistry wire bending mechanism
Rahimah Abdul Hamid, Kenta Morisaki and Teruaki Ito

3B2: Evaluation of energy efficiency in scheduling by using cyber-physical manufacturing simulator
Ryo Yonemoto, Haruhiko Suwa and Tetsuo Samukawa

3B3: Effects of optimal supervisor on scheduling performance of multi-cluster tools
Masaru Sakai and Tatsushi Nishi

10:45–11:10

Coffee Break

11:10–12:10

Keynote Speech 2

K2: Two-Dimensional Packing Problems in Telecommunications
Silvano Martello

12:10–13:40

Lunch

13:40–14:55

Technical Session 4A: Online Scheduling

4A1: Improvements in cooking process scheduling for family restaurants

Yuki Kimura, Kengo Shimizu, Tetsuya Tsuboi, Daisuke Hasegawa, Kouji Ishikawa, Keisuke Kimura, Miku Tanaka, Kazunori Ozeki, Jieying Zhou and Maiko Shigeno

4A2: Mathematical model considering restricted idle time

Satoshi Sugikawa and Yuki Inoue

4A3: Online product shipping using heuristic algorithms based on column generation

Mayu Ito, Wei Wu, Yannan Hu, Hiromichi Goko, Mihiro Sasaki and Mutsunori Yagiura

Technical Session 4B: Stochastic Programming

4B1: Multistage stochastic programming model for the capacity expansion of railway network—Solution algorithm based on the L-shaped method

Takayuki Shiina, Tomoaki Takaichi, Yige Li, Susumu Morito and Jun Imaizumi

4B2: Short-term production planning for component plans using stochastic programming

Takeshi Konno and Ken Kobayashi

4B3: Sustainable crop planning based on optimal matching between farmers and retailers

Takashi Hasuike, Tomoko Kashima and Shimpei Matsumoto

14:55–15:20

Coffee Break

15:20–17:00

Technical Session 5A: Scheduling and Urban Operations Research (1) (organized session)

Organizer: Daisuke Watanabe

5A1: A mathematical model for vehicle movements scheduling in a large parking lot

Takamori Ukai and Mihiro Sasaki

5A2: Inventory control of blood products considering the interchange among different regional-block blood centers in Japan

Mari Ito, Ayano Kaburagi and Ryuta Takashima

5A3: Relaxation of tree assumption in safe walking route design problem

Ken-ichi Tanaka, Ryuhei Miyashiro and Yuichiro Miyamoto

5A4: Point-to-point based airline network design problems

Mihiro Sasaki and Takehiro Furuta

Technical Session 5B: Production Management and Scheduling

5B1: A proposal on estimation of integrated production lead time in multi-product small-lot production

Akihisa Horio and Toyohiro Umeda

5B2: Heuristic approach to rebalancing and sequencing of a mixed-model assembly line

Aya Ishigaki

5B3: Optimization method of part selection and production scheduling with negotiation process between manufacturer and customers using pheromone statistic data

Shota Suginochi, Toshiya Kaihara, Nobutada Fujii and Daisuke Kokuryo

5B4: Computation of probabilities of an $M_n/G/1$ queue and its application to a lead time quotation model

Koichi Nakade

18:30–

Banquet

Sunday, June 25

9:00–

Registration

9:30–10:20

Technical Session 6A: Maintenance Scheduling

6A1: Shortest path based self-adjusted algorithms for joint optimization on train timetabling and maintenance task scheduling

I-Lin Wang, Ping-Cheng Lin and Fu-Yuan Cheng

6A2: A heuristic algorithm for the integrated maintenance and bus scheduling problem

Vitor M.F. Hama, Wei Wu and Mutsunori Yagiura

Technical Session 6B: Staff Scheduling

6B1: A scheduling system for anesthesiologists—A case study in Aichi medical university hospital

Hiroyuki Ichihara, Yoshito Matsuzaki, Aino Ohnishi, Atsuo Suzuki and Atsushi Hashimoto

6B2: Parameter setting approach focusing on distribution of past schedules for staff scheduling problems

Makoto Ohara and Hisashi Tamaki

10:20–10:45

Coffee Break

10:45–11:45

Invited Talk

II: Optimization Modeling with Further Requests in Objective Functions: Examples of Lexicographic Optimization Problems

Yoshiyuki Karuno

11:45–13:15

Lunch

13:15–14:55

Technical Session 7A: Scheduling and Urban Operations Research (2) (organized session)

Organizer: Daisuke Watanabe

7A1: Effect of zoning strategy on the performance of demand responsive transit

Daisuke Hasegawa, Sunyong Eom and Tsutomu Suzuki

7A2: Update method of forecasting data for DDMRP with respect to product similarity
Shuto Tsuchiya, Mondo Sugiyama, Motoki Tajima, Tsuyoshi Nobata, Miyuki Wakasugi, Masayuki Soneda and Yudai Honma

7A3: Scheduling of inspection and repairment for multiple bridges using geometric Brownian motion model
Tsuyoshi Nobata and Yudai Honma

7A4: Simulation model for emergency medical transportation with deployment of floating medical support system—The case study of Tokyo inland earthquake
Daisuke Watanabe, Takahiro Majima and Keiki Takadama

Technical Session 7B: Logistics and Supply Chain Management

7B1: A two-stage stochastic model for stock and delivery planning in disaster management
Ru Chai, Koichi Nakade and Jing Sun

7B2: A two-echelon supply chain planning with investment decision with market impact under demand uncertainty
Takuya Aoyama, Tatsushi Nishi and Guoqing Zhang

7B3: The impact of cross-channel returns on pricing decision
Mohannad Radhi and Guoqing Zhang

7B4: An option contract with optimized prices in supply chain
Abir Trabelsi, Tomoya Shimizu and Hiroaki Matsukawa

14:55–15:05

Closing Session