

AAAC2024 Program

Conference venue: I-site Namba Conference Room, Osaka

◎ : Student speaker, ○ : Non-student speaker

May 31

9:30 Registration open (Venue opens at 9:00)

10:00 Opening: Siu-Wing Cheng

10:10 – 11:30 Session 1. Chair: Siu-Wing Cheng

- Takehiro Ito, Naonori Kakimura, Naoyuki Kamiyama, Yusuke Kobayashi and ○Yoshio Okamoto
Electrical Flows over Spanning Trees on Grids
- Tingwei Hu, ○Lili Mei, Zhen Wang and Guochuan Zhang
The Price of Fairness for Budget-Feasible EF1 Allocations → Exchanged with the final talk in Session 6. New title is:
Natsuda Kaothanthong, Rurika Takami and ○Takeshi Tokuyama
Order Preserving Multiple Alignment and Rank Aggregation
- ○Yijia Chen, Yi Feng, Bundit Laekhanukit and Yanlin Liu
Simple Combinatorial Construction of the $k^{o(1)}$ -Lower Bound for Approximating the Parameterized k-Clique
- ○Zhiyi Huang
Online Correlated Selection

11:30 – 13:30 Lunch break

13:30 – 14:30 Session 2. Invited Talk 1. Chair: Ryuhei Uehara

Shuichi Hirahara

Meta-complexity and average-case complexity

14:30 – 15:00 Coffee break + Group photo

15:00 – 16:00 Session 3 (Parallel Session)

Session 3-A: Reconfiguration/Game Theory. Chair: Kunihiko Sadakane

- ◎Masaya Sano and Hiroshi Fujiwara
Decomposition of Reconfiguration Graphs of Independent Sets under Token Jumping
- ◎Ryosuke Sato

Liquid Welfare and Revenue Monotonicity of Adaptive Clinching Auctions

- ◎Chensheng Ma

Minimum Power Partial Cover with Fairness Constraint

Session 3-B : Geometry. Chair: Hee-Kap Ahn

- Siu-Wing Cheng and ◎Haoqiang Huang

Approximate Nearest Neighbor for Polygonal Curves under Fréchet Distance

- ○Man-Kwun Chiu and Matias Korman

On the Number of Three-Dimensional Consistent Digital Rays

- ◎Fucheng Xie

Maximum Irregular Shape Packing Problem via Reinforcement Learning

16:00 – 16:10 Short break

16:10 – 17:10 Session 4 (Parallel Session)

Session 4-A: Online Algorithms. Chair: Guochuan Zhang

- Yasushi Kawase and ◎Tomohiro Nakayoshi

Online Matching with Delays and Size-based Costs

- ◎Pin-Yu Yeh, Tzu-Ching Lin, Ching-Hsuan Huang and Chung-Shou Liao

Approximating with Predictions the k-Canadian Traveller Problem in Graphs

- ◎Ke-Rong Tseng, Ya-Chun Liang, Hung-Yi Lee and Chung-Shou Liao

Algorithms for Fully Online Scheduling with Testing on Multiple Machines

Session 4-B: Graph Algorithms. Chair: Yushi Uno

- ○Yuichi Asahiro, Jesper Jansson, Avraham A. Melkman, Eiji Miyano, Hirotaka Ono, Quan Xue and Shay Zakov

Shortest Longest-Maximal-Path Orientation for Trees

- Yuichi Asahiro, Hiroshi Eto, ◎Taku Kato, Guohui Lin and Eiji Miyano

Bounded-Deletion Maximum Independent Set Problem on Chordal Bipartite Graphs

- ◎Keita Miyajima and Hiroshi Fujiwara

Snow Shoveling Cost of a Graph

Banquet: 18:30 – 21:30

Nakanoshima Social Eat Awake (Basement of Osaka City Central Public Hall)

➤ Direction to Osaka City Central Public Hall (the red building on the cover page):

✧ Route A: Walk to Ebisucho Station (10min). Take Metro Sakaisuji-Line to Kitahama Station(10-15min). Walk to Osaka City Central Public Hall(5min).

- ✧ Route B: Walk to Daikokucho Station(10min). Take Metro Midosuji-Line to Yodoyabashi Station(10-15min). Walk to Osaka City Central Public Hall(5min).

June 1

9:30 Registration open

10:00 – 11:00 Session 5. Invited Talk 2. Chair: Tetsuo Asano

Herbert Edelsbrunner

Measuring the Mingling of Colored Points

11:00 – 11:30 Coffee break

11:30 – 12:50 Session 6. Chair: Chung-Shou Liao

- Shuangli Li, Bingkai Lin and ◎Yuwei Liu
Improved Lower Bounds for Approximating Parameterized Nearest Codeword and Related Problems under ETH
- Matteo Castiglioni, ◎Junjie Chen, Minming Li, Haifeng Xu and Song Zuo
On the Hardness of Single-Parameter Bayesian Contract Design
- ◎Suey Eliza Wang and Hsu-Chun Yen
Morphing of Area-Universal Contact Graph Representations
- Natsuda Kaothanthong, Rurika Takami and ○Takeshi Tokuyama
Order Preserving Multiple Alignment and Rank Aggregation → Exchanged with the second talk in Session 1. New title is:
Tingwei Hu, Lili Mei, Zhen Wang and ○Guochuan Zhang
The Price of Fairness for Budget-Feasible EF1 Allocation

Closing