REPORT FROM EATCS JAPAN CHAPTER

Yuto Nakashima (Kyushu University)

EATCS-JP/LA Workshop on TCS and Presentation Awards

The 22nd *EATCS-JP/LA Workshop on Theoretical Computer Science* was held at Maskawa Hall, Kyoto University, February 19th to 21st, 2024. (The details can also be found, although this website is written in Japanese, at `https://la-symposium.github.io/2023/winter_program.html`.)

Every year, we choose the best presenter and the best student presenter. This year, we celebrated the following presentation as the 22nd LA/EATCS-Japan Presentation Award:

> "*Analysis of Voting Process from Martingale Concentration*", **Nobutaka Shimizu** (Tokyo Institute of Technology) and Takeharu Shiraga (Chuo University)

We celebrated the following presentation as the 13th LA/EATCS-Japan Student Presentation Award:

> "*Counting the Number of Non-overlapping Edge Unfoldings in Convex Regular Faced Polyhedra*", **Takumi Shiota** (Kyushu Institute of Technology), Yudai Enomoto, Takashi Horiyama (Hokkaido University), and Toshiki Saitoh (Kyushu Institute of Technology)

The awards were recognized publicly on the last day, February 21st, 2024.

Congratulations!

This workshop is jointly organized by *LA symposium*, Japanese association of theoretical computer scientists. Its purpose is to give a place to discuss topics on all aspects of theoretical computer science. This workshop is an unrefereed meeting. All submissions are accepted for the presentation. There should be no problem of presenting these papers at refereed conferences and/or journals. This meeting is familiar and widely open for everyone who is interested in theoretical computer science. It is held twice a year (January/February and July/August). If you have a chance, I recommend that you attend it. Check the website `http://www.dais.is.tohoku.ac.jp/eatcs_japan/` for further details. The list of the presentations is as below; you can see the activity of the Japanese society of theoretical computer science.

Program of the 22nd EATCS-JP/LA workshop on TCS

In the following program, "*" indicates speakers. The number [*xx*S] means it is given by student speakers.

[1] A Data Structure for the Maximum-Sum Segment Problem with Offsets
**Yoshifumi Sakai (Tohoku University)*

[2] A Matching Algorithm for Term Tree Patterns with Contractible Variables
**Yusuke Suzuki, Tomoyuki Uchida (Hiroshima City University), Takayoshi Shoudai (Fukuoka Institute of Technology), Satoshi Matsumoto (Tokai University), Tetsuhiro Miyahara (Hiroshima City University)*

[3] Compactness for Finite Unions of Non-adjacent Regular Pattern Languages
*Naoto Taketa, *Tomoyuki Uchida (Hiroshima City University), Takayoshi Shoudai (Fukuoka Institute of Technology), Satoshi Matsumoto (Tokai University), Yusuke Suzuki, Tetsuhiro Miyahara (Hiroshima City University)*

[4S] Optimal Strategy for YOMEN
**Hirano Kouki (Nagoya University), Kiya Hironori (Osaka Metropolitan University), Hanaka Tesshu (Kyushu University), Ono Hirotaka (Nagoya University)*

[5S] Balanced Generalized Janken and its Isomorphism
**Akari Toyonaga, Atsuki Nagao (Ochanomizu University)*

[6S] Analysis of Hex and Doubutsu Shogi Powered by Graphillion
**Kazutaka Aoki, Hiroshi Fujiwara (Shinshu University)*

[7S] Reconfiguration Graphs of Independent Sets under Token Jumping
**Masaya Sano, Hiroshi Fujiwara (Shinshu University)*

[8S] Enumeration Algorithms for Maximum Matchings in Chain Graphs
**Yosei Kamada, Hiroshi Fujiwara (Shinshu University)*

[9S] The Least Core of Routing Games
**Tomohiro Kobayashi, Tomomi Matsui (Tokyo Institute of Technology)*

[10S] Polyhedral Characterization of Pareto Optimal Matchings – Approaches to Unpopularity-Matching Problem –
**Iori Moriyama, Tomomi Matsui (Tokyo Institute of Technology)*

[11S] FPT Approximation Schemes for Connected Graph Partitioning Problems with Cardinality Constraints
**Suguru Yamada, Tesshu Hanaka (Kyushu University)*

[12S] NP-Completeness of Power Domination Set Problem for Planer Graphs
**Daichi Sawayama (Saitama university), Toshinori Yamada (Saitama university)*

[13S] On the Stackelberg Minimum Cost Flow Problem
**Hideki Kitada, Toshinori Yamada (Saitama University)*

[14S] Solving the Bike Sharing Problem for Arbitrary Positioning and Constrained Movement
**Valeri Haralanov, Toshinori Yamada (Saitama University)*

[15S] Recurrence and Transince of Random Walks on Growing Dimensional Boxes
**Shuma Kumamoto (Kyushu University), Shuji Kijima (Shiga University), Tomoyuki Shirai (Kyushu University)*

[16] Reversibility of Finite Cellular Automata on Monoids
**Shuichi Inokuchi, Yuta Arima, Chihiro Iwanaga (Fukuoka Institute of Technology)*

[17S] An Edit Model and Algorithms for Achieving Properties on Intersection Graphs

**Nicolas Honorato Droguet, Kazuhiro Kurita (Nagoya University), Tesshu Hanaka (Kyushu University), Hirotaka Ono (Nagoya University)*

[18S] An Improvement of a Spectral Lower Bound for Treewidth

*Tatsuya Gima (Nagoya University), Tesshu Hanaka (Kyushu University), *Kohei Noro, Hirotaka Ono, Yota Otachi (Nagoya University)*

[19S] Improved Upper Bounds for Treewidth of Outer k-Planar Graphs

*Oksana Firman (Universität Würzburg), Myroslav Kryven (University of Manitoba), *Yuto Okada (Nagoya University), Alexander Wolff (Universität Würzburg)*

[20S] An Efficient Beer Path Query System Based on Graph Decomposition

**Kosuke Sugiyama (Nagoya University), Tesshu Hanaka (Kyushu University), Hirotaka Ono (Nagoya University), Kunihiko Sadakane (The University of Tokyo)*

[21S] Optimal Parameterized Quantum Query Complexity of Vertex Cover and Matching for Small k

**Tatsuya Terao (Kyoto University), Ryuhei Mori (Nagoya University)*

[22S] Random Generation of Tent Codes

**Naoaki Okada (Kyushu University), Shuji Kijima (Shiga University)*

[23] On the Communication Complexity of Non-Interactive Secure Multiparty Computation

**Maki Yoshida (NICT)*

[24] Analysis of Voting Process from Martingale Concentration

**Nobutaka Shimizu (Tokyo Institute of Technology), Takeharu Shiraga (Chuo University)*

[25S] LZ Parsing with Height Bounds

*Hideo Bannai (Tokyo Medical and Dental University), Mitsuru Funakoshi (NTT Communication Science Laboratories), Diptarama Hendrian, *Myuji Matsuda (Tokyo Medical and Dental University), Simon J. Puglisi (University of Helsinki)*

[26S] Computing Longest Border and Shortest Cover After Block Edit

**Kazuki Mitani (Hokkaido University), Takuya Mieno (University of Electro-Communications), Kazuhisa Seto, Takashi Horiyama (Hokkaido University)*

[27S] An Upper Bound on the Number of Maximal α-gapped Repeats in the Fibonacci Words

**Kazuma Yamane (Hokkaido University), Yuto Nakashima (Kyushu University), Kazuhisa Seto, Takashi Horiyama (Hokkaido University)*

[28] Computing Repetitiveness Measures with Answer Set Programming

**Dominik Köppl (University of Yamanashi), Mutsunori Banbara (Nagoya University)*

[29S] NP-Hardness of Minimum-Time Packages Delivery in the Line by Robots with Different Speeds

**Toshiya Hiratsuka, Yamada Toshinori (Saitama University)*

[30] Near-linear Time Dispersion of Mobile Agents

**Yuichi Sudo (Hosei University), Masahiro Shibata (Kyushu Institute of Technology), Junya Nakamura (Toyohashi University of Technology), Yonghwan Kim (Nagoya Institute of Technology), Toshimitsu Masuzawa (Osaka University)*

[31] PLS Is Contained in PLC

**Takashi Ishizuka (Fujitsu Limited)*

[32S] Clinching Auctions with Additional Buyers

**Ryosuke Sato (University of Tokyo)*

[33S] Counting the Number of Non-overlapping Edge Unfoldings in Convex Regular Faced Polyhedra

**Takumi Shiota (Kyushu Institute of Technology), Yudai Enomoto, Takashi Horiyama (Hokkaido University), Toshiki Saitoh (Kyushu Institute of Technology)*

[34S] Computing Diverse Pair of Solutions for SAT

*Tatsuya Gima (Nagoya University), Yuni Iwamasa (Kyoto University), Yasuaki Kobayashi (Hokkaido University), Kazuhiro Kurita, Yota Otachi (Nagoya University), *Rin Saito (Tohoku University)*

[35] On the Hardness of Minimal Steiner Node Multicut Enumeration

*Yasuaki Kobayashi (Hokkaido University), *Kazuhiro Kurita (Nagoya University)*

[36S] Lipschitz Continuous Algorithms for Covering Problems

**Soh Kumabe (The University of Tokyo), Yuichi Yoshida (National Institute of Informatics)*

Past/Forthcoming Events

WALCOM 2024 & 2025

International Conference and Workshops on Algorithms and Computation (WALCOM) conference has been established to encourage the researchers of theoretical computer science in Asia, especially, India and Bangladesh. Nowadays, there are many participants from a wide range of Asia, not so many from Europe so far. The organizers give a big welcome to many attendees from Europe. The 18th WALCOM (WALCOM 2024) was held in Kanazawa, Japan, from March 18th to 20th, 2024. See `https://www.kono.cis.iwate-u.ac.jp/~yamanaka/walcom2024/` for more information on WALCOM 2024. The next WALCOM will be held in Chengdu, China, from February 28th to March 2nd, 2025. See `https://tcsuestc.com/walcom2025/index.html` for more information on WALCOM 2025. The important dates are as follows:

Submission Deadline: September 22, 2024 (Anywhere on Earth)

Notification of Acceptance: November 8, 2024

AAAC 2024

Annual Meeting of the Asian Association for Algorithms and Computation (AAAC) aims at promoting collaborations in theoretical computer science in Asia (but not restricted in the region). The 15th AAAC was held in Osaka, Japan, from May 31st to June 1st, 2024. See `https://cs.kwansei.ac.jp/~tokuyama/AAAC2024.html` for more information on AAAC 2024.

CPM 2024

The 35th Annual Symposium on Combinatorial Pattern Matching (CPM 2024) will be held in Fukuoka, Japan, from June 25th to June 27th, 2024 with summer school on June 20th and 21st in Tokyo and StringMasters workshop on June 25th and 28th in Fukuoka. See `https://cpm2024.github.io/index.html` for more information of these events.

WAAC 2024
The 24th Korea–Japan Joint Workshop on Algorithms and Computation (WAAC 2024) will be held in Seoul, Korea, on August 2nd and 3rd, 2024. The aim of this workshop is to provide a forum for researchers working on algorithms and the theory of computation, to promote the exchange of recent results, to foster new collaborations among researchers. Historically, the workshop has established for the purpose of collaboration of researchers of Korea and Japan; however, participation from any country is welcome. See https://algo.postech.ac.kr/workshops/waac24/ for more information of WAAC 2024.

CIAA 2024
International Conference on Implementation and Application of Automata (CIAA) is an annual conference that concerns research on all aspects of implementation and application of automata and related structures, including theoretical aspects. The 28th CIAA (CIAA 2024) will be held in Akita, Japan, from September 3rd to 6th, 2024. See http://www.math.akita-u.ac.jp/ciaa2024/ for more information.

Workshop on Combinatorial Reconfiguration 2024
International workshop on combinatorial reconfiguration will be held in Fukuoka, Japan, from October 7th to 11th, 2024. This workshop will be the fifth in a series that was established in 2015, with events held in Japan, Canada (twice), and France. A major feature of this workshop series is to allocate ample time for participants to engage in working sessions tackling open problems, in addition to presenting the latest research findings related to combinatorial reconfiguration. See https://joint.imi.kyushu-u.ac.jp/post-15540/ for more information.

ISAAC 2024
International Symposium on Algorithms and Computation (ISAAC) is intended to provide a forum for researchers working on algorithms and computation. The 35th edition of this symposium will be held in Sydney, Australia, from December 8th to 11th, 2024. See https://sites.google.com/view/isaac2024/ for more information on ISAAC 2024.

Submission Deadline: June 28, 2024 (Anywhere on Earth)

Notification of Acceptance: September 2, 2024

EATCS Japan Chapter

Chair:	Ryuhei Uehara
Vice Chair:	Takehiro Ito
Secretary:	Yuto Nakashima
email:	eatcs-jp@grp.tohoku.ac.jp
URL:	http://www.dais.is.tohoku.ac.jp/eatcs_japan/