Report from EATCS Japan Chapter

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EATCS-JP/LA Workshop on TCS and Presentation Awards

The 19th *EATCS/LA Workshop on Theoretical Computer Science* was held online February 1st to 3rd, 2021. (The details can also be found, although this website is written in Japanese, at
`http://www-ppl.ist.osaka-u.ac.jp/la2020/winter.php`.)

Every year, we choose the best presenter and the best student presenter. This year, we celebrated the following presentation as the 19th LA/EATCS-Japan Presentation Award:

> "*Spanning trees with the maximum number of leaves of grid graphs*",
> **Masahisa Goto** and Koji M. Kobayashi (University of Tokyo)

We celebrated the following presentation as the 10th LA/EATCS-Japan Student Presentation Award:

> "*NP-completeness of k Generalized Lunar Lockout Variant*", **Kosuke Kagaya**, Masaki Tomisawa, and Hiroaki Tohyama (Maebashi Institute of Technology)

The awards were recognized publicly on the last day, February 3rd, 2021.

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 unofficial, 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.ecei.tohoku.ac.jp/alg/EATCS-J/` 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 EATCS-JP/LA workshop on TCS (February 1–3, 2021)

In the following program, "*" indicates ordinary speakers, while "**" indicates student speakers. The number [S*xx*] means it is in student session, namely, it is shorter talk than ordinary one.

[S1] On the strongest die in a set of dice with equal expected values
  ***Shang Lu, Shuji Kijima (Kyushu University)*

[S2] Computational complexity of partitioning a weighted tree into subtrees of almost equal weights with exceptions
  ***Masashi Ito (Nagoya University), Shuichi Miyazaki (Kyoto University), Shinsaku Nakajima (Meiji University), Hirotaka Ono, Yota Otachi (Nagoya University)*

[S3] NP-completeness of *k* Generalized Lunar Lockout Variant
  Kosuke Kagaya , Masaki Tomisawa, Hiroaki Tohyama (Maebashi Institute of Technology)

[S4] Computer experiments for Single Pile NIM with prohibition rule
  ***Shota Asaba, Koichi Yamazaki (Gunma University)*

[S5] Max-Min Approximation Algorithms for the 3-Item Bin Packing Problem
  ***Rina Atsumi, Hiroshi Fujiwara, Hiroaki Yamamoto (Shinshu University)*

[S6] Searching algorithm of quantum phase estimation using optical interferometer
  ***Takuto Ozu, Ryuhei Mori (Tokyo Institute of Technology)*

[S7] Optimal Online Bin Packing Algorithms for Certain Classes of Two Item Sizes
  ***Masaya Kawaguchi, Hiroshi Fujiwara, Hiroaki Yamamoto (Shinshu University)*

[S8] Distributed Complexity of *k*-Maximal Independent Set Verification
  ***Ryosuke Sato, Naoki Kitamura, Ryota Eguchi, Yonghwan Kim (Nagoya Institute of Technology), Taisuke Izumi (Osaka University)*

[S9] Search and evacuation by a modular robotic system in a 3D grid field
  ***Ryonosuke Yamada, Yukiko Yamauchi (Kyushu University)*

[S10] Compact index for full-text search using factor oracle
  ***Akihide Sato, Hiroaki Yamamoto, Hiroshi Fujiwara (Shinshu University)*

[S11] Implementation of CA150 on Turing Tumble
  ***Keigo Shimonozono, Shuichi Inokuchi (Fukuoka Institute of Technology)*

[S12] Containment of a mobile fault by blocking communication links and connectivity of communication graph
  ***Hinata Hanzawa, Yukiko Yamauchi (Kyushu University)*

[S13] Distributed Complexity of Minimum Spanning Tree in Unit Disk Graphs with Euclidean Edge Weights
  ***Aru Hokodate, Naoki Kitamura, Ryota Eguchi, Yonghwan Kim (Nagoya Institute of Technology), Taisuke Izumi (Osaka University)*

[S14] Physical Zero-Knowledge Proof for Kurodoko
  ***Ryo Itoyama (Kumamoto University), Yota Otachi (Nagoya University)*

[S15] A Match-Three Game with Continuous Moves is NP-Complete
  ***Keitaro Kawagoe, Yasuhiko Takenaga (The University of Electro-Communications)*

[S16] Mathematical Studies of Deadlock in Adaptive Match Scheduling

**Yuta Tanaka, Hiroshi Fujiwara, Hiroaki Yamamoto (Shinshu University)

[S17] Spanning spiders in bubble-sort graphs

Yosuke Kikuchi, **Chinatsu Sakamoto (NIT, Tsuyama College)

[1] Cake Cutting: A Simple Envy-Free and Truthful Mechanism with a Small Number of Cuts

*Takao Asano (Chuo University)

[2] A graphical generalization of SEVENS

*Hironori Kiya (Nagoya University), Koki Suetsugu (National Institute of Informatics), Hirotaka Ono (Nagoya University)

[3] Structural properties of graphs containing many minimal ab separators

*Koichi Yamazaki (Gunma University)

[4] Spanning trees with the maximum number of leaves of grid graphs

*Masahisa Goto, Koji M. Kobayashi (University of Tokyo)

[5] Reconfiguration problem based on re-unfolding of polyhedra

*Tonan Kamata, Ryuhei Uehara (Japan Advanced Institute of Science and Technology)

[6] On particle complexity of number conserving cellular automata

*Gil-Tak Kong, Katsunobu Imai (Hiroshima University)

[7] A reduction of the DTW distance to the LIS length

*Yoshifumi Sakai (Tohoku University), Shunsuke Inenaga (Kyushu University)

[8] Tighter lower bounds for the error probability of quantum algorithms discriminating multiple quantum channels

*Ryo Ito, Ryuhei Mori (Tokyo Institute of Technology)

[9] Communication Complexity of Quantum Private Simultaneous Messages Protocols

*Akinori Kawachi (Mie University), Harumichi Nishimura (Nagoya University)

[10] Research on Rep-cube — dissection of net of cube to nets

*Tamami Okada, Ryuhei Uehara (Japan Advanced Institute of Science and Technology)

[11] Indexing structures for labeled trees

*Shunsuke Inenaga (Kyushu University)

Forthcoming Events

ISAAC 2021

International Symposium on Algorithms and Computation (ISAAC) is intended to provide a forum for researchers working in algorithms and theory of computation. The 32nd edition of this symposium will be held in Fukuoka, Japan (+ Online) from December 6 to 8, 2021. See `https://tcs.inf.kyushu-u.ac.jp/isaac2021/` for more information on ISAAC 2021.

WALCOM 2022

The 16th International Conference and Workshops on Algorithms and Computation (WALCOM 2022) will be held at University of Jember, Indonesia from March 24th to 26th, 2022. This conference has been established to encourage the researchers of theoretical computer science in Asia, especially, India and Bangladesh. Nowadays, there are many

participants not only from a wide range of Asia but also from Europe and North America. See `https://walcom2022.unej.ac.id` for more information on WALCOM 2022.

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EATCS Japan Chapter

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