Report from EATCS Japan Chapter

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EATCS-JP/LA Workshop on TCS and Presentation Awards

The 15th *EATCS/LA Workshop on Theoretical Computer Science* was held at Research Institute of Mathematical Sciences, Kyoto University, February 1st to February 3rd, 2017. (The program also can be found, although written in Japanese, at `http://la2016.naist.ac.jp/la2016winterprogram.pdf`.)

By attendees' voting, the following talk by **Prof. Yota Otachi** (JAIST; Japan Advanced Institute of Science and Technology) was selected as the 14th EATCS/LA Presentation Award:

> "*A faster parameterized algorithm for Pseudoforest Deletion*" by Hans L. Bodlaender (Utrecht University), Hirotaka Ono (Kyushu University), and Yota Otachi (JAIST)

The award will be given to him at the Summer LA Symposium held in July 2017.

We also established another presentation award, named "EATCS/LA Student Presentation Award" to encourage students. **Yuto Nakashima** (Kyushu University) who presented the following paper, was selected as the sixth EATCS/LA Student Presentation Award:

> "*Lyndon* $<$ $2\times$*LZ77 Theorem*" by Yuto Nakashima (Kyushu University), Juha Kärkkäinen, Dominik Kempa, Simon J. Puglisi (University of Helsinki), and Arseny M. Shur (Ural Federal University)

The award (with some gift for playing in his laboratory) has been already recognized publicly at the last day, February 3, 2017.

Congratulations!

This workshop is jointly organized with *LA symposium*, Japanese association of theoretical computer scientists. Its purpose is to give a place for discussing 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 in refereed conferences and/or journals. This meeting is unofficial, familiar, and widely open for everyone who are interested in theoretical computer science. It is held twice a year (January/February and July/August). If you have a chance, I recommend you to attend it. Check `http://www.ecei.tohoku.ac.jp/alg/EATCS-J/` for further details. I list the

program below; you can observe the activity of the Japanese society of theoretical computer science.

Program of EATCS-JP/LA workshop on TCS (from February 1st to 3rd, 2017)

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.

[1] Development and implementation of an algorithm for finding subgraphs accepted by a graph automaton
**Akio Fujiyoshi (Ibaraki University)*

[2] Complex behavior in elementary triangular partitioned cellular automata
**Kenichi Morita (Hiroshima University)*

[3] Finding a Canonical Set of a Submodular Hamming Function
***Junpei Nakashima, Yukiko Yamauchi, Shuji Kijima, Masafumi Yamashita (Kyushu University)*

[4] On Approximating the TSP-Path with a Single Fixed Terminal
**Aleksandar Shurbevski (Kyoto University), Yoshiyuki Karuno (Kyoto Institute of Technology), Hiroshi Nagamochi (Kyoto University)*

[5] Energy-efficient Threshold Circuits Computing Generalized Symmetric Functions
***Hiroki Maniwa (Tohoku University), Takayuki Oki (Yamagata University), Akira Suzuki (Tohoku University), Kei Uchizawa (Yamagata University), Xiao Zhou (Tohoku University)*

[6] A Refinement of Quantum Mechanics by Algorithmic Randomness
**Kohtaro Tadaki (Chubu University)*

[7] On Sufficient Conditions for the Nondeterministic Polynomial-Time Computability of a Subproblem of the Frobenius Problem
**Shunichi Matsubara (Aoyama Gakuin University)*

[S1] New outer approximation-type pivot algorithm for Markov decision problem
***Takanari Seito, Matias Korman, Atsushi Koike, Takeshi Tokuyama (Tohoku university)*

[S2] The LR-dispersion problem
***Toshihiro Akagi (Gunma University), Tetsuya Araki (NII), Shin-ichi Nakano (Gunma University)*

[S3] Query Complexity for Discrimination of Unitary Operations
***Kenichi Kawano, Akinori Kawachi (Tokushima University), Francois Le Gall, Suguru Tamaki (Kyoto University)*

[S4] Constant Amortized Time Enumeration of Induced Matchings in Graphs without 4-Cycles
***Kazuhiro Kurita (Hokkaido University), Kunihiro Wasa, Takeaki Uno (National Institute of Informatics), Hiroki Arimura (Hokkaido University)*

[S5] Online prediction over combinatorial sets with Follow the Perturbed Leader
***Ken-ichiro Moridomi, Kohei Hatano, Eiji Takimoto (Kyushu University)*

[S6] Designing and Implementing Algorithms for the Closest String Problem
***Shota Yuasa, Zhi-Zhong Chen (Tokyo Denki University), Bin Ma (University of Waterloo), Lusheng Wang (City University of Hong Kong)*

[8] Lyndon < 2×LZ77 Theorem

***Yuto Nakashima (Kyushu University), Juha Kärkkäinen, Dominik Kempa, Simon J. Puglisi (University of Helsinki), Arseny M. Shur (Ural Federal University)*

[9] Truncated DAWG

***Yuta Fujishige (Kyushu University), Takuya Takagi (Hokkaido University), Diptarama (Tohoku University)*

[10] Sub-linear space LCE data structures

***Yuka Tanimura, Takaaki Nishimoto, Shunsuke Inenaga, Hideo Bannnai, Masayuki Takeda (Kyushu University)*

[11] A vertex ordering characterization of simple-triangle graphs

**Asahi Takaoka (Kanagawa University)*

[12] $O(n^{1/3})$-space algorithm for the grid graph reachability problem

***Ryo Ashida, Osamu Watanabe (Tokyo Institute of Technology)*

[13] Average Number of Comparisons for Sorting

**Junichi Teruyama (National Institute of Informatics), Kazuo Iwama (Kyoto University)*

[14] Tangle and ultrafilter

***Takaaki Fujita, Koichi Yamazaki (Gunma Univ.)*

[15] A faster parameterized algorithm for Pseudoforest Deletion

*Hans L. Bodlaender (Utrecht University), Hirotaka Ono (Kyushu University), *Yota Otachi (Japan Advanced Institute of Science and Technology)*

[16] Designing and Implementing Algorithms for rSPR Distance of Phylogenetic Trees

**Zhi-Zhong Chen, Eita Machida (Tokyo Denki University), Lusheng Wang (City University of Hong Kong)*

[17] On Attribute-Based Encryption with Revocation

***Kotoko Yamada (Tokyo Institute of Technology/AIST), Nuttapong Attrapadung (AIST), Keita Emura (NICT), Goichiro Hanaoka (AIST), Keisuke Tanaka (Tokyo Institute of Technology)*

[18] Sub-linear Size CryptoNote without Random Oracles

***Keisuke Hara (Tokyo Institute of Technology), Mario Larangeria (IOHK - Research Division), Keisuke Tanaka (Tokyo Institute of Technology)*

[19] Key-Privacy for Code-Based Encryption

***Yusuke Yoshida, Kirill Morozov, Keisuke Tanaka (Tokyo Institute of Technology)*

[20] Plane Formation Problem for Semi-Synchronous Robots with non-rigid movement in 3D Space

***Taichi Uehara, Yukiko Yamauchi, Shuji Kijima, Masafumi Yamashita (Kyushu University)*

[21] Long-period rotor walk of lonely tokens

***Kenichi Tamatani, Yukiko Yamauchi, Shuji Kijima, Masafumi Yamashita (Kyushu University)*

[22] An algorithm for evaluating connectivity on networks with switch failures

**Jun Kawahara, Koki Sonoda (Nara Institute of Science and Technology), Takeru Inoue (Nippon Telegraph and Telephone Corporation), Shoji Kasahara (Nara Institute of Science and Technology)*

EATCS Japan Chapter

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