

REPORT FROM EATCS JAPAN CHAPTER

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EATCS-JP/LA Workshop on TCS and Presentation Awards

The 16th *EATCS/LA Workshop on Theoretical Computer Science* was held at Research Institute of Mathematical Sciences, Kyoto University, February 5th to 7th, 2018. (The program can also be found, although written in Japanese, at http://www.shino.ecei.tohoku.ac.jp/semi/LA2017/winter_program.html.)

Every year, we choose and celebrate the best presenter and the best student presenter. This year, three presentations were so good that we could not choose one of them, so we celebrated the following three presentations as the 15th EATCS/LA Presentation Award:

“Proving Turing Universality of Oritatami Co-transcriptional Folding”, ***Shinnosuke Seki** (University of Electro-Communications, Tokyo)

“Herugolf is NP-complete”, ***Chuzo Iwamoto**, Masato Haruishi (Hiroshima University)

“Space-efficient algorithms for longest increasing subsequence”, Masashi Kiyomi (Yokohama City University), Hirotaka Ono (Nagoya University), ***Yota Otachi** (Kumamoto University), Pascal Schweitzer (TU Kaiserslautern), Jun Tarui (The University of Electro-Communications)

The presenters are marked by “*”. We also established another presentation award, named “EATCS/LA Student Presentation Award” to encourage students. **Hayato Konno** (Tohoku University) who presented the following paper was selected as the 7th EATCS/LA Student Presentation Award:

“Colored Token Swapping Problem on Graphs”, ***Hayato Konno**, Akira Suzuki (Tohoku University), Katsuhisa Yamanaka (Iwate University), Takehiro Ito, Xiao Zhou (Tohoku University)

The award (with some gift for playing in his laboratory) was recognized publicly on the last day, February 7th, 2018.

Congratulations!

This workshop is jointly organized with *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 are 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 <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 5–7, 2018)

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

- [s1] Towards the Algorithmic Molecular Self-Assembly of Fractals by Cotranscriptional Folding
**Yusei Masuda, Yuki Ubukata (*The University of Electro-Communications*)
- [s2] On Approximation Algorithms for k-Anonymity
**Kotoko Yamada, Takeshi Ohzu, Masahiro Ishii, Keisuke Tanaka (*Tokyo Institute of Technology*)
- [s3] On Complexity of k-Anonymity
**Takeshi Ohzu, Kotoko Yamada, Masahiro Ishii, Keisuke Tanaka (*Tokyo Institute of Technology*)
- [s4] Boosting with Frank-Wolfe updates
**Ryotaro Mitsuboshi (*Kyushu University*), Kohei Hatano (*Kyushu University / RIKEN AIP*), Eiji Takimoto (*Kyushu University*)
- [s5] Deciding the winning player in two-player TANHINMIN and its variant
**Hironori Kiya (*Kyushu university*), Hirotaka Ono (*Nagoya university*)
- [s6] Generalized partition problem on population protocol model
**Tomoki Umino, Naoki Kitamura, Taisuke Izumi (*Nagoya Institute of Technology*)
- [s7] On Depth Two Majority Circuits for Computing Majority Functions
**Masafumi Yoshida, Kazuyuki Amano (*Gunma University*)
- [1] A maximal common subsequence algorithm
*Yoshifumi Sakai (*Tohoku University*)
- [2] Longest Lyndon Word After One Edit Operation
**Yuuki Urabe, Yuto Nakashima, Shunsuke Inenaga, Hideo Bannai, Masayuki Takeda (*Kyushu University*)
- [3] Shortest Unique Palindromic Substring Problem
**Hiroe Inoue, Takuya Mieno, Yuto Nakashima, Shunsuke Inenaga, Hideo Bannai, Masayuki Takeda (*Kyushu University*)
- [4] Longest Lyndon Word in Streams
*Yuto Nakashima (*Kyushu University*)
- [5] Learning of Primitive Formal Systems Defining Labeled Ordered Tree Languages via Queries

- *Tomoyuki Uchida (*Hiroshima City University*), Satoshi Matsumoto (*Tokai University*), Takayoshi Shoudai (*Kyushu International University*), Yusuke Suzuki, Tetsuhiro Miyahara (*Hiroshima City University*)
- [6] A study on relation between tangle and ultrafilter
**Takaaki Fujita, Koichi Yamazaki (*Gunma Univ.*)
- [7] Proving Turing Universality of Oritatami Co-transcriptional Folding
*Shinnosuke Seki (*University of Electro-Communications, Tokyo*)
- [8] An Enumeration Algorithm for Dominating Set in k-degenerate Graphs
**Kazuhiro Kurita (*Hokkaido University*), Kunihiro Wasa, Takeaki Uno (*National Institute of Informatics*), Hiroki Arimura (*Hokkaido University*)
- [9] Isomorphism Elimination by Zero-Suppressed Binary Decision Diagrams
*Takashi Horiyama, Masahiro Miyasaka, Riku Sasaki (*Saitama University*)
- [10] How to find a dense subgraph
*Hiroki Yanagisawa (*IBM Research - Tokyo*), Satoshi Hara (*Osaka University*)
- [s8] Model Checking of Embedded Systems Using RTCTL
**Wu Yajun, Satoshi Yamane (*Kanazawa University*)
- [s9] Longest Palindromic Substring After One Edit Operation
**Mitsuru Funakoshi, Yuto Nakashima, Shunsuke Inenaga, Hideo Bannai, Masayuki Takeda (*Kyushu University*)
- [s10] Graph theory from the view point of a beads artist
**Yuta Fujishige (*Kyushu University*)
- [s11] On the minimum block transfer problem
**Yagita Tsuyoshi (*Kyushu Institute of Technology*), Asahiro Yuichi (*Kyushu Sangyo University*), Miyano Eiji (*Kyushu Institute of Technology*)
- [s12] The rotation poset for stable allocations
**Koki Yamamoto, Yukiko Yamauchi, Shuji Kijima, Masafumi Yamashita (*Kyushu University*)
- [s13] Inferring a minimum graph of bounded degree 2 from a walk
**Shintaro Narisada, Ryo Yoshinaka, Ayumi Shinohara (*Tohoku University*)
- [11] The Computability by an Oblivious Autonomous Mobile Robot with Limited Visibility
**Akihiro Monde, Yukiko Yamauchi, Shuji Kijima, Masafumi Yamashita (*Kyushu University*)
- [12] Herugolf is NP-complete
*Chuzo Iwamoto, Masato Haruishi (*Hiroshima University*)
- [13] Space-efficient algorithms for longest increasing subsequence
Masashi Kiyomi (*Yokohama City University*), Hirotaka Ono (*Nagoya University*), *Yota Otachi (*Kumamoto University*), Pascal Schweitzer (*TU Kaiserslautern*), Jun Tarui (*The University of Electro-Communications*)
- [14] Nonbipartite Dulmage-Mendelsohn Decomposition for Berge Duality
*Nanao Kita (*National Insititute of Informatics*)
- [15] The Stable Marriage Problem with Multiple Preference Lists
Kazuya Okamoto, *Shuichi Miyazaki (*Kyoto University*)
- [16] Colored Token Swapping Problem on Graphs
**Hayato Konno, Akira Suzuki (*Tohoku University*), Katsuhisa Yamanaka (*Iwate University*), Takehiro Ito, Xiao Zhou (*Tohoku University*)
- [17] The number of distinct segment locations in beta-expansion with rational beta.

- **Tomita Yusaku, Kijima Shuji (Kyushu University)*
- [18] Trinagulation with Many/Few Triangles
**Hiroshi Eto, Tesshu Hanaka (Kyushu University), Eiji Miyano, Ayumi Nishijima (Kyushu Institute of Technology), Hirotaka Ono (Nagoya University), Yota Otach (Kumamoto University), Toshiki Saitoh (Kyushu Institute of Technology), Ryuhei Uehara (Japan Advanced Institute of Science and Technology), Tom C. van der Zanden (Utrecht University)*
- [19] An FPTAS for the volume of the convex hull of an n dimensional crosspolytope and two points
**Ei Ando (Sojo University), Christian Engels (Indian Institute of Technology Bombay)*

Past/Forthcoming Events

WALCOM 2018/WALCOM 2019

The 12th International Conference and Workshops on Algorithms and Computation (WALCOM 2018) will be held in Dhaka, Bangladesh during March 03–05, 2018. This conference has been established to encourage the researchers of theoretical computer science in Asia, especially, India and Bangladesh. Nowadays, while there are many participants from wide range of Asia, not so many from Europe so far. The organizers give a big welcome to many attendees from Europe. You can find more information on the conferences at <https://cse.buet.ac.bd/walcom2018/>.

The next WALCOM will be held during February 27– March 2, 2019 at IIT Guwahati, India. See <http://www.iitg.ac.in/walcom2019/> for more information on WALCOM 2019. The important dates are as follows:

Submission Deadline: September 15, 2018

Notification of Acceptance: October 25, 2018

ISAAC 2018

The 29th International Symposium on Algorithms and Computation (ISAAC 2018) will take place in Jiaoxi, Yilan County, Taiwan on December 16–19, 2018. The symposium is intended to provide a forum for researchers working on algorithms and theory of computation. The important dates are as follows (To make sure for these important dates, please check the web site at <http://isaac2018.ie.nthu.edu.tw/>):

Submission Deadline: June 29, 2018 (Anywhere on Earth)

Notification of Acceptance: August 31, 2018

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