

Combinatorial Pattern Matching 2022

June 27-29, 2022, Prague

Conference Program

Monday, June 27, 2022

08:00 - 08:50	Registration
08:50 - 09:00	Opening Remarks
Invited talk I (Chair: Jan Holub)	
09:00 - 10:00	<i>Sharma V. Thankachan</i> Compact Text Indexing for Advanced Pattern Matching Problems: Parameterized, Order-isomorphic, 2D, etc.
10:00 - 10:20	Coffee break
Session I (Chair: Solon Pissis)	
10:20 - 10:45	<i>Yuma Arakawa, Gonzalo Navarro, and Kunihiko Sadakane</i> Bi-directional r-indexes
10:45 - 11:10	<i>Nicola Rizzo and Veli Mäkinen</i> Indexable Elastic Founder Graphs of Minimum Height
11:10 - 11:35	<i>Takuya Mieno, Shunsuke Inenaga, and Takashi Horiyama</i> RePair Grammars are the Smallest Grammars for Fibonacci Words
11:35 - 11:55	Break
Session II (Chair: Golnaz Badkobeh)	
11:55 - 12:20	<i>Davide Cenzato and Zsuzsanna Liptak</i> A theoretical and experimental analysis of BWT variants for string collections
12:20 - 12:45	<i>Diego Diaz and Gonzalo Navarro</i> Efficient Construction of the BWT for Repetitive Text Using String Compression
12:45 - 13:10	<i>Avivit Levy, Ely Porat, and B. Riva Shalom</i> Partial Permutations Comparison, Maintenance and Applications
13:10 - 14:30	Lunch
Highlight Talk I (Chair: Esko Ukkonen)	
14:30 - 15:00	<i>Tomasz Kociumaka</i> Small space and streaming pattern matching with k edits
Session III (Chair: Jakub Radoszewski)	
15:00 - 15:25	<i>Tsubasa Oizumi, Takeshi Kai, Takuya Mieno, Shunsuke Inenaga, and Hiroki Arimura</i> Cartesian Tree Subsequence Matching
15:25 - 15:50	<i>Philip Bille, Inge Li Gørtz, Shay Mozes, Teresa Anna Steiner, and Oren Weimann</i> The Fine-Grained Complexity of Episode Matching
15:50 - 16:10	Coffee break
Session IV (Chair: Shunsuke Inenaga)	
16:10 - 16:35	<i>Abhinav Nellore and Rachel Ward</i> Arbitrary-length analogs to de Bruijn sequences
16:35 - 17:00	<i>Giulia Bernardini, Huiping Chen, Grigorios Loukides, Solon Pissis, Leen Stougie, and Michelle Sweering</i> Making de Bruijn Graphs Eulerian
17:00 - 17:10	Break
17:10 - 17:40	Business Meeting

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Session V (Chair: Inge Li Gørtz)	
09:00 - 09:25	<i>Vincent Jugé</i> Reduction ratio of the IS-algorithm: worst and random cases
09:25 - 09:50	<i>Tooru Akagi, Kouta Okabe, Takuya Mieno, Yuto Nakashima, and Shunsuke Inenaga</i> Minimal Absent Words on Run-Length Encoded Strings
09:50 - 10:15	<i>Laurent Bulteau, Philippe Gambette, and Olga Seminck</i> Reordering a tree according to an order on its leaves
10:15 - 10:35	Coffee break
Session VI (Chair: Tomasz Kociumaka)	
10:35 - 11:00	<i>Giulia Bernardini, Alessio Conte, Esteban Gabory, Roberto Grossi, Grigorios Loukides, Solon Pissis, Giulia Punzi and Michelle Sweering</i> On Strings Having the Same Length-k Substrings
11:00 - 11:25	<i>Panagiotis Charalampopoulos, Solon Pissis, and Jakub Radoszewski</i> Longest Palindromic Substring in Sublinear Time
11:25 - 11:50	<i>Davaajav Jargalsaikhan, Diptarama Hendrian, Ryo Yoshinaka, and Ayumi Shinohara</i> Parallel algorithm for pattern matching problems under substring consistent equivalence relations
11:50 - 12:10	Break
Invited talk II (Chair: Gad Landau)	
12:10 - 13:10	<i>Jeffrey Shallit</i> Using automata and a decision procedure to prove results in pattern matching
13:10 - 14:30	Lunch
Highlight Talk II (Chair: Nadia Pisanti)	
14:30 - 15:00	<i>Moses Ganardi</i> Compression by Contracting Straight-Line Programs
Session VII (Chair: Maxime Crochemore)	
15:00 - 15:25	<i>Raphael Clifford, Pawel Gawrychowski, Tomasz Kociumaka, Daniel Martin, and Przemysław Uznański</i> The Dynamic k-Mismatch Problem
15:25 - 15:50	<i>Dana Fisman, Joshua Grogin, Oded Margalit, and Gera Weiss</i> The Normalized Edit Distance with Uniform Operation Costs is a Metric
15:50	Excursion and Conference Dinner

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Wednesday, June 29, 2022

Invited talk III (Chair: Hideo Bannai)	
09:00 - 10:00	<i>Takehiro Ito</i> Invitation to Combinatorial Reconfiguration
10:00 - 10:20	Coffee break
Session VIII (Chair: Gabriele Fici)	
10:20 - 10:45	<i>Maxime Crochemore, Costas Iliopoulos, Jakub Radoszewski, Wojciech Rytter, Juliusz Straszyński, Tomasz Waleń, and Wiktor Zuba</i> Linear-Time Computation of Shortest Covers of All Rotations of a String
10:45 - 11:10	<i>Jakub Radoszewski, Wojciech Rytter, Juliusz Straszyński, Tomasz Waleń, and Wiktor Zuba</i> Rectangular Tile Covers of 2D-strings
11:10 - 11:35	<i>Laurent Bulteau, Guillaume Fertin, Vincent Jugé, and Stéphane Vialette</i> Permutation Pattern Matching for Doubly Partially Ordered Patterns
11:35 - 11:55	Break
Session IX (Chair: Pawel Gawrychowski)	
11:55 - 12:20	<i>Laurent Bulteau, Mark Jones, Rolf Niedermeier, and Till Tantau</i> An FPT-Algorithm for Longest Common Subsequence Parameterized by the Maximum Number of Deletions
12:20 - 12:45	<i>Wenfeng Lai, Adiesha Liyanage, Binhai Zhu, and Peng Zou</i> Beyond the Longest Letter-duplicated Subsequence Problem
12:45 - 13:10	<i>Yuichi Asahiro, Jesper Jansson, Guohui Lin, Eiji Miyano, Hirotaka Ono, and Tadatoshi Utashima</i> Polynomial-Time Equivalence and Refined Algorithms for Longest Common Subsequence Variants
13:10 - 14:30	Lunch
Session X (Chair: Zsuzsanna Liptak)	
14:30 - 14:55	<i>Golnaz Badkobeh, Maxime Crochemore, Jonas Ellert, and Cyril Nicaud</i> Back-to-Front Online Lyndon Forest Construction
14:55 - 15:20	<i>John Machacek</i> Mechanical proving with Walnut for squares and cubes in partial words
15:20 - 15:25	Closing Remarks