

25th Annual Symposium on Combinatorial Pattern Matching

# CPM

JUNE 16-18, 2014

Moscow  
RUSSIA



HIGHER SCHOOL OF ECONOMICS  
NATIONAL RESEARCH UNIVERSITY

Yandex

## Monday, June 16

<b>08:30-09:00</b>	<b>Registration</b>	
<b>09:00-10:00</b>	<b>Special Session of the 25<sup>th</sup> Anniversary of CPM</b> Sequence Comparison in the Time of Deluge. <i>Alberto Apostolico.</i>	<i>Chair: Pavel Pevzner</i>
<b>10:00-10:20</b>	<b>Coffee break</b>	
<b>10:20-11:20</b>	<b>Special Session of the 25<sup>th</sup> Anniversary of CPM</b> Repeats in Strings. <i>Maxime Crochemore.</i>	<i>Chair: Pavel Pevzner</i>
<b>11:20-11:40</b>	<b>Coffee break</b>	
<b>11:40-12:40</b>	<b>Special Session of the 25<sup>th</sup> Anniversary of CPM</b> What's behind BLAST. <i>Gene Myers.</i>	<i>Chair: Pavel Pevzner</i>
<b>12:40-14:30</b>	<b>Lunch</b>	
<b>14:30-16:10</b>	<b>Contributed talks</b>	<i>Chair: Maxim Crochemore</i>
<b>14:30-14:55</b>	<b>Approximate On-line Palindrome Recognition, and Applications.</b> <i>Amihood Amir and Benny Porat.</i>	
<b>14:55-15:20</b>	<b>Searching of Gapped Repeats and Subrepetitions in a Word.</b> <i>Roman Kolpakov, Mikhail Podolskiy, Mikhail Posypkin and Nickolay Khrapov.</i>	

<b>15:20-15:45</b>	<b>Efficient Algorithms for Shortest Partial Seeds in Words.</b> <i>Tomasz Kociumaka, Solon Pissis, Jakub Radoszewski, Wojciech Rytter and Tomasz Walen.</i>
<b>15:45-16:10</b>	<b>Computing Palindromic Factorizations and Palindromic Covers On-line.</b> <i>Tomohiro I, Shiho Sugimoto, Shunsuke Inenaga, Hideo Bannai and Masayuki Takeda.</i>
<b>16:10-16:30</b>	<b>Coffee break</b>
<b>16:30-18:10</b>	<b>Contributed talks</b> <span style="float: right;"><i>Chair: Amihood Amir</i></span>
<b>16:30-16:55</b>	<b>Encodings for Range Majority Queries.</b> <i>Gonzalo Navarro and Sharma V. Thankachan.</i>
<b>16:55-17:20</b>	<b>Compressed Subsequence Matching and Packed Tree Coloring.</b> <i>Philip Bille, Patrick Hagge Cording and Inge Li Gørtz.</i>
<b>17:20-17:45</b>	<b>Compactness-Preserving Mapping on Trees.</b> <i>Rashid Ibragimov, Jiong Guo and Jan Baumbach.</i>
<b>17:45-18:10</b>	<b>Indexed Geometric Jumbled Pattern Matching.</b> <i>Stephane Durocher, Robert Fraser, Travis Gagie, Debajyoti Mondal, Matthew Skala and Sharma Thankachan.</i>

## Tuesday, June 17

<b>09:00-10:00</b>	<b>Invited talk</b> <b>How To Think Big.</b> <i>Udi Manber.</i>	<i>Chair: Gene Myers</i>
<b>10:00-10:20</b>	<b>Coffee break</b>	
<b>10:20-11:35</b>	<b>Contributed talks</b>	<i>Chair: Moshe Lewenstein</i>
<b>10:20-10:45</b>	<b>Permuted Scaled Matching.</b> <i>Ayelet Butman, Noa Lewenstein and Ian Munro.</i>	
<b>10:45-11:10</b>	<b>Approximate String Matching using a Bidirectional Index.</b> <i>Gregory Kucherov, Kamil Salikhov and Dekel Tsur.</i>	
<b>11:10-11:35</b>	<b>On Hardness of Several String Indexing Problems.</b> <i>Kasper Green Larsen, Jesper Sindahl Nielsen, Sharma V. Thankachan and Ian Munro.</i>	
<b>11:35-11:50</b>	<b>Coffee break</b>	

## CPM 2014 Programme

<b>11:50-12:40</b>	<b><i>Contributed talks</i></b>	<i>Chair: Gonzalo Navarro</i>
<b>11:50-12:15</b>	<b>Most Recent Match Queries in On-Line Suffix Trees.</b>	<i>N. Jesper Larsson.</i>
<b>12:15-12:40</b>	<b>Order-preserving Pattern Matching with k Mismatches.</b>	<i>Pawel Gawrychowski and Przemyslaw Uznanski.</i>
<b>12:40-14:30</b>	<b><i>Lunch</i></b>	
<b>14:30-18:30</b>	<b><i>Excursion</i></b>	
<b>18:30-21:00</b>	<b><i>Dinner</i></b>	

## Wednesday, June 18

<b>09:00-09:25</b>	<b>CPM 2015</b>	
<b>09:25-10:40</b>	<b>Contributed talks</b>	<i>Chair: Alexander Tiskin</i>
<b>09:25-09:50</b>	<b>On the Efficiency of the Hamming C-Centerstring Problems.</b> <i>Amihood Amir, Jessica Fidler, Liam Roditty and Oren Sar Shalom.</i>	
<b>09:50-10:15</b>	<b>Parameterized Complexity Analysis for the Closest String with Wildcards Problem.</b> <i>Danny Hermelin and Liat Rozenberg.</i>	
<b>10:15-10:40</b>	<b>Randomized and Parameterized Algorithms for the Closest String Problem.</b> <i>Zhi-Zhong Chen, Bin Ma and Lusheng Wang.</i>	
<b>10:40-11:00</b>	<b>Coffee break</b>	
<b>11:00-12:40</b>	<b>Contributed talks</b>	<i>Chair: Gregory Kucherov</i>
<b>11:00-11:25</b>	<b>The Worst Case Complexity of Maximum Parsimony.</b> <i>Amir Carmel, Noa Musa-Lempel, Dekel Tsur and Michal Ziv-Ukelson.</i>	
<b>11:25-11:50</b>	<b>From Indexing Data Structures to de Bruijn Graphs.</b> <i>Bastien Cazaux, Thierry Lecroq and Eric Rivals.</i>	
<b>11:50-12:15</b>	<b>On the DCJ Median Problem.</b> <i>Mingfu Shao and Bernard Moret.</i>	
<b>12:15-12:40</b>	<b>Reversal Distances for Strings with Few Blocks or Small Alphabets.</b> <i>Laurent Bulteau, Guillaume Fertin and Christian Komusiewicz.</i>	
<b>12:40-14:30</b>	<b>Lunch</b>	

<b>14:30-16:10</b>	<b>Contributed talks</b>	<i>Chair: Simon Puglisi</i>
<b>14:30-14:55</b>	<b>Dictionary Matching with One Gap.</b> <i>Amihood Amir, Avivit Levy, Ely Porat and Riva Shalom.</i>	
<b>14:55-15:20</b>	<b>An Improved Query Time for Succinct Dynamic Dictionary Matching.</b> <i>Guy Feigenblat, Ely Porat and Ariel Shifatan.</i>	
<b>15:20-15:45</b>	<b>String Range Matching.</b> <i>Juha Kärkkäinen, Dominik Kempa and Simon Puglisi.</i>	
<b>15:45-16:10</b>	<b>Computing Minimal and Maximal Suffixes of a Substring Revisited.</b> <i>Maxim Babenko, Pawel Gawrychowski, Tomasz Kociumaka and Tatiana Starikovskaya.</i>	
<b>16:10-16:30</b>	<b>Coffee break</b>	
<b>16:30-18:10</b>	<b>Contributed talks</b>	<i>Chair: Pawel Gawrychowski</i>
<b>16:30-16:55</b>	<b>Shortest Unique Substring Query Revisited.</b> <i>Atalay Mert Ileri, M. Oguzhan Kulekci and Bojian Xu.</i>	
<b>16:55-17:20</b>	<b>A Really Simple Approximation of Smallest Grammar.</b> <i>Artur Jez.</i>	
<b>17:20-17:45</b>	<b>On Combinatorial Generation of Prefix Normal Words.</b> <i>Péter Burcsi, Gabriele Fici, Zsuzsanna Liptak, Frank Ruskey and Joe Sawada.</i>	
<b>17:45-18:10</b>	<b>Computing <math>k</math>-th Lyndon Word and Decoding Lexicographically Minimal de Bruijn Sequence.</b> <i>Tomasz Kociumaka, Jakub Radoszewski and Wojciech Rytter.</i>	
<b>18:10</b>	<b>Closing</b>	

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