12th Japanese-Hungarian Symposium
March 21-24, 2023 in Budapest, Hungary

| March 21, Tuesday |  |  |
| :---: | :---: | :---: |
|  | Room Eötvös (0.83.) | Room Than Károly (065) |
| 09:00 | Registration |  |
| 09:50 | Opening |  |
| $\begin{aligned} & \hline 10: 00 \\ & 10: 45 \end{aligned}$ | H. Hirai <br> Algebraic combinatorial optimization for noncommutative rank \& determinant |  |
| 10:50 | Coffee break |  |
| $\begin{aligned} & \hline 11: 20 \\ & 12: 05 \end{aligned}$ | S. Tanigawa Rigidity of hypergraphs under algebraic constraints |  |
| 12:10 | Lunch break |  |
| 14:00 | M. Higashida <br> Abstract rigidity matroids of uniform hypergraphs | Gy. O. H. Katona <br> Extremal graphs without long paths and large cliques |
| $\begin{aligned} & 14: 25 \\ & 14: 45 \end{aligned}$ | D. Garamvölgyi <br> Algebraic realizations of pairs of closure operators | B. Patkós <br> Connected Turán number of trees |
| $\begin{aligned} & 14: 50 \\ & 15: 10 \end{aligned}$ | T. Jordán On generic universal rigidity on the line | K. Encz <br> Extremal graph theoretical questions for q-ary graphs |
| 15:15 | Coffee break |  |
| $\begin{aligned} & \hline 15: 40 \\ & 16: 00 \\ & \hline \end{aligned}$ | A. Dumitrescu <br> Two-sided convexity testing with certificates | T. Oki <br> Algebraic algorithms for fractional linear matroid parity via non-commutative rank |
| $\begin{aligned} & \hline 16: 05 \\ & 16: 25 \end{aligned}$ | Cs. D. Tóth <br> Geodesic diameter in polygons with holes | E. Szabó <br> Submodular flows with minimal spread |
| $\begin{aligned} & \hline 16: 30 \\ & 16: 50 \\ & \hline \end{aligned}$ | G. Tóth <br> Helly-type theorems for hypergraphs | A. Recski <br> Genericity and maps of matroids |
| 16:55 | Break |  |
| $\begin{aligned} & \hline 17: 00 \\ & 17: 20 \\ & \hline \end{aligned}$ | V. E. Kaszanitzky <br> Rigid planar subgraphs in the triangulations of the double torus | A. Shioura <br> A characterization of bivariate multi-unit assignment valuations |
| $\begin{aligned} & \hline 17: 25 \\ & 17: 45 \\ & \hline \end{aligned}$ | Cs. Király <br> On the size of highly redundantly rigid graphs | Á. Fraknói <br> Compiling packet programs to dRMT switches: Theory and algorithms |
| $\begin{aligned} & \hline 17: 50 \\ & 18: 10 \end{aligned}$ | L. Matúz <br> Pebble Game algorithms and their implementations | T. Király <br> Scheduling under a resource constraint: The case of negligible processing times |

## 18:30 Reception, BME Building Q

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| March 22, Wednesday |  |  |
| :---: | :---: | :---: |
|  | Room Eötvös (0.83.) | Room Than Károly (065.) |
| $\begin{aligned} & \hline 09: 00 \\ & 09: 45 \end{aligned}$ | N. Kakimura Matching in Bipartite Graphs with Stochastic Arrivals and Departures |  |
| 09:50 | Break |  |
| $\begin{aligned} & \hline 10: 00 \\ & 10: 45 \\ & \hline \end{aligned}$ | K. Bérczi Dynamic pricing schemes |  |
| 10:50 | Coffee break |  |
| $\begin{aligned} & \hline 11: 20 \\ & 11: 40 \end{aligned}$ | R. Mizutani Supermodular extension of Vizing's edge-coloring theorem | L. M. Mendoza-Cadena <br> Newton-type algorithms for inverse optimization problems I: Weighted infinity norm |
| $\begin{aligned} & \hline 11: 45 \\ & 12: 05 \end{aligned}$ | M. Simon On vertex-coloring \{a,b\}-edge-weightings of graphs | K. Varga <br> Newton-type algorithms for inverse optimization problems II: Weighted span |
| $\begin{aligned} & \hline 12: 10 \\ & 12: 30 \end{aligned}$ | J. Pintér <br> Color-avoiding connected spanning subgraphs with minimum number of edges | Gy. Pap <br> New results on synchronized TSP |
| 12:35 | Lunch break |  |
| 14:00 | Z. Szigeti <br> Packing mixed hyperarborescences | B. Vass <br> Faster algorithm for enumerating maximal sets of close line segments |
| 14:25 | N. A. Borsik Arc-partitioning and vertex-ordering problems | E. Bérczi-Kovács <br> Polynomial-time algorithm for the regional SRLG-disjoint paths problem |
| 14:50 | Z. L. Blázsik <br> Quest for graphs of Frank number 3 | S. Kumabe <br> Lipschitz continuous graph algorithms |
| 15:15 | Coffee break |  |
| $\begin{aligned} & 15: 40 \\ & 16: 00 \\ & \hline \end{aligned}$ | L. Tóthmérész <br> Degrees of interior polynomials and parking function enumerators | H. Yamaji <br> On the number of maximal cliques in two-dimensional random geometric graphs: Euclidean and hyperbolic |
| $\begin{aligned} & \hline 16: 05 \\ & 16: 25 \end{aligned}$ | P. P. Pach <br> Common systems of two equations over the binary field | K. Teramoto <br> Quantum-relaxation based optimization algorithms: Theoretical extensions |
| 16:30 | A. Sali Optimal cutting arrangements in 1D | V. Nemkin <br> Simulations of quantum walks on regular graphs |
| $\begin{aligned} & \hline 16: 55 \\ & 17: 15 \end{aligned}$ | A. Tóbiás <br> Absence of percolation in graphs based on stationery point processes with degrees bounded by two | A. Pongrácz <br> Generalized solution for the Herman protocol conjecture |

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| March 23, Thursday |  |  |
| :---: | :---: | :---: |
|  | Room Eötvös (0.83.) | Room Than Károly (065.) |
| $\begin{array}{\|l\|} \hline 09: 00 \\ 09: 45 \\ \hline \end{array}$ | T. Tokuyama <br> Sorting columns of a matrix to optimize nondecreasing subsequences of rows |  |
| 09:50 | Break |  |
| 10:00 | K. Makino <br> Composition ordering for linear functions |  |
| 10:50 | Coffee break |  |
| 11:20 | T. Fleiner <br> Division of goods and bads to many players |  |
| 12:10 | Lunch break |  |
| 13:40 | A. Sebő Jump systems of T-paths |  |
| 14:05 | S. Iwata <br> Openly disjoint paths, jump systems, and discrete convexity |  |
| 14:30 | Y. Kobayashi <br> Reconfiguration of graph orientations with connectivity constraints |  |
| 14:55 | Coffee break |  |
| 15:20 | Y. Yokoi <br> Solving the maximum popular matching problem with matroid constraints | P. Ágoston Orientation of convex sets |
| $\begin{array}{\|l\|} \hline 15: 45 \\ 16: 05 \\ \hline \end{array}$ | G. Csáji <br> Approximation algorithms for matroidal and cardinal generalizations of stable matching | B. Keszegh <br> Orientation of good covers |
| $\begin{array}{\|l\|} \hline 16: 10 \\ 16: 30 \\ \hline \end{array}$ | Y. Amano <br> An FPT algorithm for the envy-free ride allocation with respect to destination types | D. Nagy The extensible No-Three-In-Line problem |
| 16:35 | Break |  |
| $16: 45$ <br> $17: 05$ <br> $17: 10$ | P. Gehér <br> Chromatic number of Minkowski planes | Y. Iwamasa <br> A combinatorial algorithm for computing the entire sequence of the maximum degree of minors of a generic partitioned polynomial matrix with $2 \times 2$ submatrices |
| $\begin{array}{\|l\|} \hline 17: 10 \\ 17: 30 \\ \hline \end{array}$ | A. Gujgiczer <br> Widely colorable graphs and their multichromatic numbers | K. Buza <br> Data augmentation does not necessarily beat a smart algorithm |
| 17:35 | G. Simonyi <br> On the generalized Mycielskian of complements of odd cycles | L. Csató <br> Fairness versus transparency in the UEFA Champions League: <br> How to choose a random perfect matching in a balanced bipartite graph |


| 18:30 | Banquet, Trófea Restaurant Újbuda |
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| March 24, Friday |  |  |
| :---: | :---: | :---: |
|  | Room Eötvös (0.83.) | Room Than Károly (065.) |
| $\begin{aligned} & \hline 09: 00 \\ & 09: 45 \end{aligned}$ | Y. Yamaguchi Matroid intersection under restricted oracles |  |
| 09:50 | Break |  |
| $\begin{aligned} & \hline \text { 10:00 } \\ & \text { 10:20 } \end{aligned}$ | R. Mahara <br> Finding a PROPavg allocation in polynomial time | Á. Vékássy <br> The importance of being series-parallel |
| $\begin{aligned} & 10: 25 \\ & 10: 45 \end{aligned}$ | P. Madarasi <br> Simultaneous assignments | Zs. Szádoczki <br> The GRAPH of graphs of optimal subsets of pairwise comparisons |
| $\begin{aligned} & \hline 10: 50 \\ & 11: 10 \end{aligned}$ | Z. Király Upper bounds for the necklace folding problems | G. Wiener <br> Fault-tolerance of leaf-guaranteed graphs |
| 11:15 | Break |  |
| $\begin{aligned} & \hline 11: 40 \\ & 12: 00 \\ & \hline \end{aligned}$ | D. P. Szabo <br> Connecting multicut and multiway cut using the complement of the demand graph | A. Jung <br> Radon number of graph families |
| $\begin{aligned} & 12: 05 \\ & 12: 25 \\ & \hline \end{aligned}$ | B. Mátravölgyi <br> Weighted exchange distance of basis pairs | H. Khan <br> Polynomial time algorithm to compute the toughness in graphs with bounded treewidth |
| $\begin{aligned} & \hline 12: 30 \\ & 12: 50 \\ & \hline \end{aligned}$ | T. Schwarcz <br> Partitioning into common independent sets via relaxing strongly base orderability | D. Pfeifer <br> On a matrix representation of a sequence of chordal graphs |

