

Thursday March 14th, 2024

time slot	Amphi 1	Amphi 2
08:00-08:45	Coffee	
	Session 13 (Track A) — chair: ALEXANDRE VIGNY	Session 14 (Track B) — chair: MARKUS BLAESER
08:45-09:10	KATARZYNA KOWALSKA: “Parameterized and approximation algorithms for coverings points with segments in the plane”	EMRE YOLCU: “Lower bounds for set-blocked clauses proofs”
09:10-09:35	TARA ABRISHAMI: “Max Weight Independent Set in sparse graphs with no long claws”	PIERRE OHLMANN: “Positionality in Σ_2^0 and a completeness result”
09:35-10:00	SEBASTIAN HASLEBACHER: “On the Exact Matching Problem in Dense Graphs”	HARSH BEOHAR: “Expressive Quantale-valued Logics for Coalgebras: an Adjunction-based Approach”
10:00-10:25	* HAITAO WANG: “Algorithms for Computing Closest Points for Segments”	JULIAN DCOSTA: “Nonnegativity Problems for Matrix Semigroups”
10:25-11:00	Coffee break	
11:00-12:00	Invited speaker: SOFYA RASKHODNIKOVA: — chair: DANIEL LOKSHTANOV “The Role of Local Algorithms in Privacy” — Amphi 1	
12:30-14:00	Lunch and coffee	

*: online presentation

Two rooms with blackboards are open for free discussions. They are the rooms A001 and A211 in ISIMA building (follow the “Discussion rooms” arrows). Please feel free to use them.

We kindly ask the presenters to upload their pdf presentation on the plugged computer **before** the start of the session. Please make yourself known to the chair.

Clermont-Ferrand - France

STACS 2024

March 12-14

41st International Symposium on Theoretical Aspect of Computer Science

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Tuesday March 12th, 2024

time slot	Amphi 1	Amphi 2
08:30-09:30	Registration	
09:30-09:45	Welcome — Amphi 1	
	Session 1 (Track A) — chair: CHRISTOPHE PAUL	Session 2 (Track A) — chair: SOPHIE HUIBERTS
09:50-10:15	HARRIS DAVID: “A faster algorithm for Vertex Cover parameterized by solution size”	ZEKUN YE: “Quantum and Classical Communication Complexity of Permutation-Invariant Functions”
10:15-10:40	JAKUB BALABAN: “Computing Twin-Width Parameterized by the Feedback Edge Number”	GEOFFROY CAILLAT-GRENIER: “Spectral approach to the communication complexity of multi-party key agreement”
10:40-11:05	* IGOR RAZGON: “FPT Approximation of Generalised Hypertree Width for Bounded Intersection Hypergraphs”	JESSE VAN RHIJN: “Worst-Case and Smoothed Analysis of Hartigan’s Method for k-Means Clustering”
11:05-11:30	* ILDIKO SCHLOTTER: “Shortest Two Disjoint Paths in Conservative Graphs”	* SWAGATO SANYAL: “Randomized query composition and product distributions”
11:30-13:00	Lunch	
13:00-14:00	Invited speaker: SZYMON TORUŃCZYK: — chair: MAMADOU M. KANTÉ “Structurally tractable graph classes” — Amphi 1	
14:00-14:20	Coffee break	
	Session 3 (Track A) — chair: IOAN TODINCA	Session 4 (Track A) — chair: CYRIL NICAUD
14:20-14:45	JACK DIPPEL: “One n Remains to Settle the Tree Conjecture”	AGRIM DEWAN: “Testing equivalence to design polynomials”
14:45-15:10	CHRISTOPHE PAUL: “Tree-Layout Based Graph Classes: Proper Chordal Graphs”	DHARA THAKKAR: “On the power of border width-2 ABPs over fields of characteristic 2”
15:10-15:35	LAURENT VIENNOT: “Temporalizing digraphs via linear-size balanced bi-trees”	JACEK KRZACZKOWSKI: “Circuit equivalence in 2-nilpotent algebras”
15:35-16:00	FLORIAN ANDREAS MARWITZ: “Faster Graph Algorithms Through DAG Compression”	MICHAEL KOMPATSCHER: “The subpower membership problem of 2-nilpotent algebras”
16:00-16:20	Coffee break	
	Session 5 (Track A) — chair: KIM THANG NGUYEN	Session 6 (Track A) — chair: ANTOINE AMARILLI
16:20-16:45	YUTONG YANG: “A Faster Algorithm for Constructing the Frequency Difference Consensus Tree”	LISA WILHELM: “Algorithms for Claims Trading”
16:45-17:10	FRANZISKA EBERLE: “ $O(1/\epsilon)$ is the answer in online weighted throughput maximization”	DANIEL NEUEN: “Homomorphism-Distinguishing Closedness for Graphs of Bounded Tree-Width”
17:10-17:35	FABIAN FREI: “Removable Online Knapsack and Advice”	NINA RUNDE: “The Complexity of Homomorphism Reconstructibility”
17:35-18:00	MATTHIAS GEHNEN: “Online Simple Knapsack with Bounded Predictions”	OLEG VERBITSKY: “On a Hierarchy of Spectral Invariants for Graphs”
18:30-22:30	Welcome Food and Drinks: Regional Products Tasting - ISIMA building, room A002	

*: online presentation

Wednesday March 13th, 2024

time slot	Amphi 1	Amphi 2
08:00-08:45	Coffee	
	Session 7 (Track A) — chair: LAURENT VIENNOT	Session 8 (Track B) — chair: MARKUS LOHREY
08:45-09:10	SEBASTIEN ZEITOUN: “Local certification of local properties: tight bounds, trade-offs and new parameters”	STEFAN GOELLER: “The AC0-Complexity Of Visibly Pushdown Languages”
09:10-09:35	ANKITA SARKAR: “Fault-tolerant k-Supplier with Outliers”	NICOLA COTUMACCIO: “A Myhill-Nerode Theorem for Generalized Automata, with Applications to Pattern Matching and Compression”
09:35-10:00	MARCIN BIENKOWSKI: “A Subquadratic Bound for Online Bisection”	IRMAK SAGLAM: “Directed Regular and Context-Free Languages”
10:00-10:25	PETER STRULO: “Decremental Sensitivity Oracles for Covering and Packing Minors”	JAMES MAIN: “Arena-independent Memory Bounds for Nash Equilibria in Reachability Games”
10:25-10:40	Coffee break	
	Session 9 (Track A) — chair: FLORIN MANEA	Session 10 (Track B) — chair: THOMAS SCHWENTICK
10:40-11:05	GUY EVEN: “An Improved Approximation Algorithm for Dynamic Minimum Linear Arrangement”	RICCARDO GOZZI: “Solving discontinuous initial value problems with unique solutions is equivalent to computing over the transfinite”
11:05-11:30	PHILIP SIMON WHITTINGTON: “The 2-Attractor Problem is NP-Complete”	ANTON VARONKA: “Linear Loop Synthesis for Quadratic Invariants”
11:30-11:55	JAKUB JAN RADOSZEWSKI: “Approximate Circular Pattern Matching under Edit Distance”	NICOLAS BITAR: “Contributions to the Domino Problem: Seeding, Recurrence and Satisfiability”
11:55-12:20	TERESA ANNA STEINER: “Gapped String Indexing in Subquadratic Space and Sublinear Query Time”	DIETRICH KUSKE: “Modal logic is more succinct iff bi-implication is available in some form”
12:20-13:25	Lunch	
13:25-13:45	Coffee break	
13:45-14:45	Invited speaker: IGOR CARBONI OLIVEIRA: — chair: OLAF BEYERSDORFF “Polynomial-Time Pseudodeterministic Constructions” — Amphi 1	
14:45-15:15	Coffee break	
	Session 11 (Track A) — chair: MOSHE LEWENSTEIN	Session 12 (Track B) — chair: DIETRICH KUSKE
15:15-15:40	GIANLUCA TASINATO: “Hardness of linearly ordered 4-colouring of 3-colourable 3-uniform hypergraphs”	FLORIN MANEA: “Semënov Arithmetic, Affine VASS, and String Constraints”
15:40-16:05	VLADIMIR LYSIKOV: “Fixed-parameter debordering of Waring rank”	C. AISWARYA: “Satisfiability of Context-free String Constraints with Subword ordering and Transducers”
16:05-16:30	TAMEEM SALMAN CHOUDHURY: “Depth-3 Circuit Lower Bounds for k-OV”	ERIK PAUL: “Weighted HOM-Problem for Nonnegative Integers”
16:30-16:55	* LIU YING: “The sub-exponential time lower bounds for #VC and #Matching”	HERMANN WILHELM: “A characterization of efficiently compilable constraint languages”
17:00-18:00	Business meeting: report and feelings of authors	
19:30-22:00	Conference Dinner - Brasserie Madeleine - city center	