

Permutation Patterns 2021


Tuesday 15th June


UK time (UTC+1)


Welcome 16.00–16.05


Session A: Algorithms and computational complexity 16.05–17.05


Chair: Torsten Mütze


An automatic direct enumeration of $Av(1342)$ — [Émile Nadeau](#) 

Automated bijections with Combinatorial Exploration — [Jon Steinn Eliasson](#) 

Pattern-avoiding rectangulations and permutations — [Arturo Merino](#) 


Counting small patterns and testing for independence — [Chaim Even-Zohar](#) 


Hardness of \mathcal{C} -permutation pattern matching — [Michal Opler](#) 


Sorting time of permutation classes — [Vít Jelínek](#) 


Session B: Classical avoidance and pattern densities 17.30–18.30

Chair: Jeff Liese


Permutations with exactly one copy of a monotone pattern of length k , and a generalization — [Alex Burstein](#) 

Permutations avoiding sets of patterns with long monotone subsequences — [Miklós Bóna](#) 

Universal 321-avoiding permutations — [Bogdan Alecu](#) 

Layered permutations and their density maximisers — [Adam Kabela](#) 

Feasible regions and permutation patterns — [Raul Penaguiao](#) 

Permutation limits at infinitely many scales — [David Bevan](#) 


Conference photo

Break 18.45–19.45

📺 Lucas Gerin's pre-recorded keynote address will be streamed during the break.


Session C: Keynote address 19.45–20.15


Chair: Lara Pudwell


Patterns in substitution-closed permutations: a probabilistic approach — [Lucas Gerin](#) 

Session D: Probability 20.30–21.30

Chair: Tony Mendez

Increasing subsequences in random separable permutations — [Valentin Feray](#) 

Fixed points of permutations avoiding increasing patterns — [Erik Slivken](#) 

A simple proof of a CLT for vincular permutation patterns for conjugation invariant permutations — [Mohamed Slim Kammoun](#) 

Two equators of the permutohedron — [Joshua Cooper](#) 

A probabilistic approach to generating trees — [Jacopo Borga](#) 

The density of Costas arrays decays exponentially — [Lutz Warnke](#) 

Wednesday 16th June

UK time (UTC+1)


Session A: Algebra, permutations and words

16.00–17.00

Chair: Alex Burstein


Rowmotion on 321-avoiding permutations — [Ben Adenbaum](#) 

Permutation groups and permutation patterns — [Erkko Lehtonen](#) 

Spherical Schubert varieties and pattern avoidance — [Christian Gaetz](#) 

Some combinatorial results on smooth permutations — [Shoni Gilboa](#) 

On the existence of bicrucial permutations — [Tom Johnston](#) 


Qubonacci words — [Sergey Kirgizov](#) 


Session B: Permutation statistics

17.30–18.30

Chair: Bruce Sagan


Pattern avoidance in cyclic permutations — [Jinting Liang](#) 

The bivariate generating function on the statistics Peak and Des for cyclic permutations on $[n + 2]$ which avoid the patterns $[1324]$ and $[1423]$ — [James Schmidt](#) 

Admissible pinnacle sets and ballot numbers — [Rachel Domagalski](#) 


A formula for counting the number of permutations with a fixed pinnacle set — [Quinn Minnich](#) 

A new algorithm for counting the admissible orderings of a pinnacle set — [Alexander Sietsema](#) 

New refinements of a classical formula in consecutive pattern avoidance — [Yan Zhuang](#) 

Break


18.45–19.45

 Luca Ferrari's pre-recorded keynote address will be streamed during the break.

Session C: Keynote address

19.45–20.15


Chair: Rebecca Smith

Sorting with stacks and queues: some recent developments — [Luca Ferrari](#) 


Session D: Permutations and patterns

20.30–21.30


Chair: Vince Vatter


Sorting with a popqueue — [Lapo Cioni](#) 

Triangular permutation matrices — [Vadim Lozin](#)

On SIF permutations avoiding a pattern — [Michael D. Weiner](#) 

On pattern avoidance in matchings and involutions — [Justin M. Troyka](#) 

Bijections for derangements and pattern-avoiding inversion sequences — [Sergi Elizalde](#) 

Classical pattern-avoiding permutations of length 5 — [Anthony Guttman](#) 

Closing

21.30–21.35