

Analysis Seminar

Pattern-avoiding permutations, longest increasing subsequences and Chebyschev polynomials

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Abstract: *Ulam's problem*, the longest increasing subsequence problem for uniformly random permutations, has a long and interesting history. In the first part of the talk, I will briefly review the solution of this problem in its classical setting, and then present some new results for some pattern-avoiding permutation classes. Chebyshev polynomials appear in some expected value calculations for some specific patterns. The talk will be accessible to non-specialists. Students who are in search of term projects are encouraged to attend the talk. (There will be some overlaps between this talk and an earlier talk I gave in the department!) The talk is based on joint work with T. Mansour (Univ. of Haifa).

Date: Tuesday, October 16, 2018

Time: 16:00-17:00

Place: Mathematics Seminar Room, SA – 141

Tea and cookies will be served before the seminar.