

Extremal properties of permutations

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We will present the following three results:

- A solution of a problem of Graham on quasirandom permutations.
- Finite forcibility of permutation limits with finitely many constant parts.
- A proof of strong testability of hereditary properties of permutations, which was conjectured by Hoppen, Kohayakawa, Moreira and Sampaio.

The first two of these results are based on associating sequences of permutations with probability measures on the unit square and exploiting analytic aspects of the obtained limit object.