

# Combinatorics Seminar

Friday January 11, 2013 at 2PM

**Room B1.01**

*(Note the room change from last term!)*

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## Hereditary properties of permutations are strongly testable

We show that for every hereditary permutation property  $\mathcal{P}$  and every  $\varepsilon_0 > 0$ , there exists an integer  $M$  such that if a permutation  $\pi$  is  $\varepsilon_0$ -far from  $\mathcal{P}$  in the Kendall's tau distance, then a random subpermutation of  $\pi$  of order  $M$  has the property  $\mathcal{P}$  with probability at most  $\varepsilon_0$ . This settles an open problem proposed by Kohayakawa whether hereditary permutation properties are strongly testable, i.e., testable with respect to the Kendall's tau distance. Joint work with Dan Král'.

If time permits, we will also present a construction of a finitely approximable permutation parameter that is not finitely forcible; this answers another question of Hoppen, Kohayakawa, Moreira, and Sampaio.

**There will be refreshments (coffee, tea, biscuits, fruits) for the attendees.**

**Everyone is welcome.**



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