

QUASIRANDOM COMBINATORIAL STRUCTURES

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Time: Thursday, Apr. 29th, 16:00 - 17:00

Zoom meeting ID: 880 0570 6580 Password: 121323

Link: <https://zoom.com.cn/j/88005706580>

Abstract: A combinatorial structure is said to be quasirandom if it resembles a random structure in a certain robust sense. The notion of quasirandom graphs, developed in the work of Rödl, Thomason, Chung, Graham and Wilson in 1980s, is particularly robust as several different properties of truly random graphs, e.g., subgraph density, edge distribution and spectral properties, are satisfied by a large graph if and only if one of them is.

We will discuss quasirandom properties of other combinatorial structures, tournaments, permutations and Latin squares in particular, and present several recent results obtained using analytic tools of the theory of combinatorial limits.

The talk is based on results obtained with different groups of collaborators, including Timothy F. N. Chan, Jacob W. Cooper, Robert Hancock, Adam Kabela, Ander Lamaison, Taísa Martins, Roberto Parente, Samuel Mohr, Jonathan A. Noel, Yanitsa Pehova, Oleg Pikhurko, Maryam Sharifzadeh, Fiona Skerman and Jan Volec.