Institut für Diskrete Mathematik

Seminar für Kombinatorik und Optimierung

Friday 12th March 14:15

Online meeting (Webex)

Prague dimension of random graphs

Lutz Warnke

(Georgia Institute of Technology)

The Prague dimension of graphs was introduced by Nešetřil, Pultr and Rödl in the 1970s: as a combinatorial measure of complexity, it is closely related to clique edge coverings and partitions. Proving a conjecture of Furedi and Kantor, we show that the Prague dimension of the binomial random graph is typically of order $n/(\log n)$ for constant edge-probabilities. The main new proof ingredient is a Pippenger-Spencer type edge-coloring result for random hypergraphs with large uniformities, i.e., edges of size $O(\log n)$.

Based on joint work with He Guo and Kalen Patton, see https://arxiv.org/abs/2011.09459

Meeting link:

https://tugraz.webex.com/tugraz/j.php?MTID=me01f43109c693c884b459339d643d7d9

Meeting number: 121 128 5385

Password: e8pQ8ZBQN4B

Joshua Erde, Mihyun Kang