Graz University of Technology

Institut für Diskrete Mathematik

Combinatorics Seminar

Friday 24th March 12:30

Online meeting (Webex)

An exponential improvement for diagonal Ramsey

Julian Sahasrabudhe

(University of Cambridge)

Let $R(k)$ be the kth diagonal Ramsey number: the smallest n for which every red/blue edge-colouring of the complete graph on n vertices contains a monochromatic complete graph of size k. I will discuss the proof that $R(k) < (4 - c)^k$, for some absolute constant $c > 0$. This is the first exponential improvement over the bound of Erdős and Szekeres, proved in 1935.

This is based on joint work with Marcelo Campos, Simon Griffiths and Rob Morris.

Meeting link:

https://tugraz.webex.com/tugraz/j.php?MTID=m3162bb7e6bef850e659f657a18095a1c

Meeting number: 2733 453 3442

Password: bSDVGJDp976

Joshua Erde, Mihyun Kang