Department of Mathematics, BGU

Combinatorics Seminar

In extremal graph theory, we often consider large graphs that are in the limit uniquely determined by finitely many densities of their subgraphs. The corresponding limits (so-called graphons) are called finitely forcible. Motivated by classical results in extremal combinatorics as well as by recent developments in the study of finitely forcible graphons, Lovasz and Szegedy made some conjectures about the structure of such graphons. In particular, they conjectured that the topological space of typical points of every finitely forcible graphon is compact and finitely dimensional. In joint results with D. Kral, T. Klimosova, and J. Volec, we could disprove both conjectures.