

Institut für Diskrete Mathematik

Combinatorics Seminar

Friday 28th June 12:30

Online meeting (Webex)

Extremal problems in the hypercube

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For two (hyper)graphs G and H, the extremal number ex(G, H) is the largest number of edges in an H-free subgraph of the ground graph G. Determining ex(G, H) remains a challenge in general, even when G is a complete graph K_n . However, in this case we know exactly what (hyper)graphs H have a positive or zero Turán density $\pi(H)$, where $\pi(H) = \lim_{n\to\infty} ex(K_n, H)/||K_n||$. When the ground graph G is the hypercube Q_n of dimension n, we don't even have such a characterisation. In this talk, I will present what we know about $ex(Q_n, H)$ and how this extremal number relates to the classical extremal numbers of hypergraphs.

Meeting link:

 $https://tugraz.webex.com/tugraz/j.php?MTID {=} m8500c46344212abf0fa37925da5ef9bf$

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