

Institut für Diskrete Mathematik

Seminar für Kombinatorik und Optimierung

Friday 30th April 14:15

Online meeting (Webex)

Extremal problems for multigraphs

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An (n, s, q) -graph is an n -vertex multigraph in which every s -set of vertices spans at most q edges. Turan-type questions on the maximum of the sum of the edge multiplicities in such multigraphs have been studied since the 1990s. More recently, Mubayi and Terry posed the problem of determining the maximum of the product of the edge multiplicities in (n, s, q) -graphs. In this talk we will discuss recent progress on this problem, including a result that shows for infinitely many choices of (s, q) , the solution is transcendental. This answers a question of Alon. This is joint work with Nick Day and Victor Falgas-Ravry.

Meeting link:

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

Meeting number: 121 128 5385

Joshua Erde, Mihyun Kang