

Institut für Diskrete Mathematik

Combinatorics Seminar

Friday 2nd December 12:15

AE06 Steyrergasse 30, EG / Webex

Degree sequences of random uniform hypergraphs

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Consider the probability that a random graph selected uniformly from the set of r -uniform hypergraphs with n vertices and m edges, has a given degree sequence. Previously the value of this probability has been investigated by Kamčev, Liebenau and Wormald, where they examined degree sequences from very sparse to moderately dense hypergraphs when $r = o(n^{1/4})$ and the variation of the degrees is small, but exceeds the typical degree variation in random hypergraphs.

We extend their results, by establishing this result for dense hypergraphs, which hold for any value of r and allow for a greater variation on the degrees.

This is joint work with Catherine Greenhill, Mikhail Isaev and Brendan McKay.

Meeting link:

<https://tugraz.webex.com/tugraz/j.php?MTID=m44797227fd680cc7956ebb840b6f033a>

Meeting number: 2730 500 3129

Password: vQydpG372D4

Joshua Erde, Mihyun Kang, Michael Missethan