

Institut für Diskrete Mathematik

**Combinatorics Seminar**

Friday 22nd October 14:15

Online meeting (Webex)

**Spanning  $F$ -cycles in random graphs**

YURY PERSON

(TU Ilmenau)

We extend a recent argument of Kahn, Narayanan and Park about the threshold for the appearance of the square of a Hamilton cycle to other spanning structures. In particular, for any spanning graph, we give a sufficient condition under which we may determine its threshold. As an application, we find the threshold for a set of cyclically ordered copies of  $C_4$  that span the entire vertex set, so that any two consecutive copies overlap in exactly one edge and all overlapping edges are disjoint. This answers a question of Frieze. We also determine the threshold for edge-overlapping spanning  $K_r$ -cycles.

Meeting link:

<https://tugraz.webex.com/tugraz/j.php?MTID=ma70275cd258e7748417214793956c7bf>

Meeting number: 188 980 7021

Password: ahMZ84fJYQ2

Joshua Erde, Mihyun Kang