

Institut für Diskrete Mathematik

Combinatorics Seminar

Friday 24th October 12:30 Online meeting (Webex) & AE06, Steyrergasse 30

Optimally packing Hamilton cycles in random directed digraphs

Adva Mond

(King's College London)

At most how many edge-disjoint Hamilton cycles does a given directed graph contain? It is easy to see that one cannot pack more than the minimum in-degree or the minimum out-degree of the digraph. We show that in the random directed graph D(n,p) one can pack precisely this many edge-disjoint Hamilton cycles, with high probability, given that p is at least the Hamiltonicity threshold, up to a polylog factor.

Based on a joint work with Asaf Ferber.

Meeting link:

https://tugraz.webex.com/tugraz/j.php?MTID=maf534adc0b2d38dd1859e16cbc8d5f84

Mihyun Kang, Ronen Wdowinski