Institut für Diskrete Mathematik

Seminar für Kombinatorik und Optimierung

Friday 20th November 14:15

Online meeting (Webex)

A solution to Erdős and Hajnal's odd cycle problem

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(University of Birmingham)

I will discuss how to construct cycles of many different lengths in graphs, in particular answering the following two problems on odd and even cycles. Erdős and Hajnal asked in 1981 whether the sum of the reciprocals of the odd cycle lengths in a graph diverges as the chromatic number increases, while, in 1984, Erdős asked whether there is a constant C such that every graph with average degree at least C contains a cycle whose length is a power of 2.

This is joint work with Hong Liu.

Meeting link:

  https://tugraz.webex.com/tugraz/j.php?MTID=m1cd0904285a119237aa9a7ce985ad803

Meeting number: 137 149 1265

Password: JYc3B3dunG2

Joshua Erde, Mihyun Kang