

Institut für Diskrete Mathematik

Vortrag im Seminar für Kombinatorik und Optimierung

Dienstag 11.10.2016, 14:00

Seminarraum AE06, Steyrergasse 30, Erdgeschoss

Supersaturation Problem for Colour-Critical Graphs

OLEG PIKHURKO

(University of Warwick)

The Turan function $\text{ex}(n, F)$ of a graph F is the maximum number of edges in an F -free graph with n vertices. The results of Turan and Rademacher from 1941 led to the study of supersaturated graphs where the key question is to determine the minimum number of copies of F that a graph with n vertices and $\text{ex}(n, F) + q$ edges can have. In general, this problem seems to be very difficult and is wide open.

I will present joint results with Zed Yilma, where we concentrate on the case when $q = o(n^2)$ and F is colour-critical (that is, the removal of some edge from F decreases its chromatic number).

Mihyun Kang