Graz University of Technology

Institut für Optimierung und Diskrete Mathematik

Vortrag im Seminar Diskrete Mathematik und Optimierung

Freitag 25.9.2015, 14:15

Seminarraum C208, Steyrergasse 30, 2. Stock

Random graphs:
sandwiching, subgraph counts extension statements

Matas Šileikis

(University of Oxford)

In this talk I will present some results on random graphs. First result (joint with A. Dudek, A. Frieze and A. Rucinski) concerns embedding of the random graph $G(n, m)$ into the random d-regular graph $R(n, d)$, where $m \sim nd/2$. This allows to transfer monotone increasing properties from $G(n, m)$ to $R(n, d)$. In the remaining time I will cover some results on the subgraph counts in the random graph $G(n, p)$ (the "infamous upper tail" problem) as well as joint work with L. Warnke on extension statements (a generalization of the fact that whenever $np \gg \log n$, the degree sequence of $G(n, p)$ is concentrated around np).

Mihyun Kang und Philipp Sprüssel