

Institut für Diskrete Mathematik

Vortrag im Seminar für Kombinatorik und Optimierung

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Seminarraum AE06, Steyrergasse 30, Erdgeschoss

The Evolution of Random Graphs on Surfaces

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For integers $g, m \geq 0$ and $n > 0$, let $S_{n,m}^g$ denote the graph taken uniformly at random from the set of all graphs on $\{1, 2, \dots, n\}$ with exactly $m = m(n)$ edges and with genus at most g . We use counting arguments to investigate the components, subgraphs, maximum degree, and largest face size of $S_{n,m}^g$, finding that there is often different asymptotic behaviour depending on the ratio m/n .

This is joint work with Mihyun Kang and Philipp Sprüssel.

Mihyun Kang