

Random graphs and applications to Coxeter groups

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Erdős and Renyi introduced a model for studying random graphs of a given “density” and proved that there is a sharp threshold at which lower density random graphs are disconnected and higher density ones are connected. Motivated by ideas in geometric group theory we will explain some new threshold theorems we have discovered for random graphs. We will then, explain applications of these results to the geometry of Coxeter groups. Some of this talk will be on joint work with Hagen and Sisto; *other parts are joint work with Hagen, Susse, and Falgas-Ravry.*

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