

Universality of Random Graphs

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Abstract

We prove that asymptotically (as $n \rightarrow \infty$) almost all graphs with n vertices and $n^{2-\frac{1}{d}} \log n$ edges are universal with respect to the family of all graphs with maximum degree bounded by d . In other words, a typical graph with that many edges contains as subgraph every possible graph with at most n vertices and maximum degree at most d .

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