Embedding spanning trees in random graphs near the connectivity threshold

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Abstract

We prove that a given tree $T$ on $n$ vertices with bounded maximum degree is contained almost surely in the binomial random graph $G(n, (1+\varepsilon)\frac{\log n}{n})$ provided that $T$ belongs to one of the following two classes: (1) $T$ has linearly many leaves; (2) $T$ has a path of linear length all of whose vertices have degree two in $T$.

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