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 $G(n, \frac{(1+\varepsilon)\log n}{n})$ 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.

Based on joint work with Michael Krivelevich and Tibor Szabó.