

Notes on 2-point concentration in the random graph

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Abstract

We say that an integer-valued random variable X defined on $G_{n,p}$ is concentrated on 2 values if there is a function $f(n)$ such that the probability that X equals $f(n)$ or $f(n) + 1$ tends to 1 as n goes to infinity. 2-point concentration has been a central issue in the study of random graphs from the beginning. In this talk we survey some recent progress in our understanding of this phenomenon, with an emphasis on the independence number and domination number of the random graph.

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