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Title:

“Stein’s method meets dynamic random networks”

Abstract:

Many real world structures can be modelled by random networks. We will focus on a preferential attachment model where the network grows in time and new vertices connect to older ones with probability depending on a sublinear function of the degree of the older vertex. Developing Stein’s method for a class of limiting degree distributions provides rates of convergence as the number of vertices tends to infinity. Looking at the number of isolated vertices Stein’s method also yields a central limit theorem for a class of attachment functions.