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Yule process sample path asymptotics

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Abstract

This paper presents two results on sample paths for the Yule process: one fluid limit theorem and one sample path large deviation result. The main interest is to understand the way large deviation occurs in the case of non-homogeneous processes. There are indeed two new phenomena. First there is no ``typical'' speed of large deviation. Second, the large deviation event is concentrated on a finite interval of time.

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