

RIGIDITY PHENOMENA IN RANDOM POINT SETS AND APPLICATIONS

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In several naturally occurring (infinite) point processes, we show that the number (and other statistical properties) of the points inside a finite domain are determined, almost surely, by the point configuration outside the domain. This curious phenomenon we refer to as “rigidity”. We will discuss rigidity phenomena in point processes and their applications. Depending on time, we will talk about applications to stochastic geometry and to random instances of some classical questions in Fourier analysis.