

Geometry, Groups and Dynamics/GEAR Seminar
(held at the Illinois hub of GEAR)

Tuesday, September 30, 2014, 1:00 pm, 243 Altgeld Hall

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Hitting time statistics for observations and application to random dynamical systems

Abstract: We study the distribution of hitting and return times for observations of dynamical systems. We apply this results to get an exponential law for the distribution of hitting and return time for rapidly mixing random dynamical systems. For random subshifts of finite type, we analyze the distribution of hitting times with respect to the sample measures and prove that under fast mixing assumptions one can get an exponential law.

[Video](#)