Mathematics, Statistics, and Computer Science   **@ UIC**

Analysis and Applied Mathematics Seminar

Standard map, Lyapunov exponent and randomness

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Abstract: It is an important open problem in dynamical systems to prove positive Lyapunov exponent for the standard map. In this talk I will introduce the problem, explain its significance and discuss the main difficulty. I will also talk about my joint work with Blumenthal and Young on this problem: by introducing a extremely small random perturbation to the map, we prove large positive Lyapunov exponent for the randomized system.

Monday, January 30 at 4:00 PM in SEO 636