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

Midwest Dynamical Systems

Entropy in measurable dynamics

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Abstract: In 1958, Kolmogorov defined the entropy of a probability measure preserving transformation. Entropy has since been central to the classification theory of measurable dynamics. In the 70's and 80's researchers extended entropy theory to measure preserving actions of amenable groups (Kieffer, Ornstein-Weiss). My recent work generalizes the entropy concept to actions of sofic groups; a class of groups that contains for example, all subgroups of GL(n,C). Applications include the classification of Bernoulli shifts over a free group. This answers a question of Ornstein and Weiss.

Saturday, November 7 at 10:30 AM in SEO 636