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

Logic Seminar

Regular cross-sections of Borel flows

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Abstract: A cross-section of a Borel flow is a Borel set that has countable intersection with each orbit of the flow. We shall be interested in constructing cross-sections with a prescribed set of possible distances between adjacent points within orbits. The main result of the talk is that given any two rationally independent positive reals and a free Borel flow one can always find a cross-section with distances between adjacent points being only these two real numbers.

We shall give an overview of the subject from both ergodic theoretical and descriptive points of view and an application of the above result to orbit equivalence of flows will be presented.

Tuesday, October 7 at 4:00 PM in SEO 427