

## Department Colloquium

Speaker: Tobiash Hurth, University of Toronto

Date: Friday, November 6

Time: 2:30 p.m.

Place: Jeffery 234

Title: Dynamical systems with random switching

**Abstract:** In this talk, I will describe some aspects of the ergodic theory for dynamical systems with random switching. These systems arise from switching between deterministic flows from a finite collection at random times. In particular, we will consider conditions under which there is a unique invariant measure that is also absolutely continuous. For some examples in one and two dimensions, we will describe the density of the invariant measure. The talk is based on work with Yuri Bakhtin, Sean Lawley and Jonathan Mattingly.