## **Mathematics** Department–University of Kansas

Faculty Candidate Colloquium

## Equivariant Constructions in Probability and Ergodic Theory

by

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## Tuesday, February 26, 2013 4:00 pm 306 Snow Hall Aronszajn Seminar Room

Can we (randomly) translate a bi-infinite sequence of i.i.d. coin- flips so that the resulting distribution is the original distribution conditioned to have a head at the origin? Given a Poisson process, by introducing additional randomization, we can (randomly) delete points to obtain another Poisson process of lower intensity; can thinning be achieved without additional randomization? Given an invertible ergodic measure-preserving dynamical system, can we endow a shift-invariant measure on the space of all bi-infinite sequences over a finite number of symbols so that resulting symbolic dynamical system is isomorphic to the original one? We will discuss these and other closely related problems and developments in probability and ergodic theory.

Refreshments will be served in 406 Snow at 3:30 pm.