Probability Seminar

Organizer: Christian Gromoll & Tai Melcher

Monday, 2:00–3:00pm, Kerchof 326

Apr 2 **Weining Kang**, Carnegie Mellon

Characterizations of the invariant measure for a class of reflected diffusions via the extended Skorokhod map

In this talk we focus on a class of reflected diffusions in polyhedrons defined via the extended Skorokhod map. We show that the reflected diffusion has certain boundary property, i.e., the pushing process in the reflected diffusion charges zero on the amount time the reflected diffusion spends at the boundary away from a "bad" set V where two or more faces meet. Further, under suitable conditions, the reflected diffusion has an unique invariant measure and such an invariant measure satisfies a basic adjoint relationship.