

abstract

Joint IAS-PU Symplectic Geometry Seminar
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

I discuss two examples of random symplectic maps in this talk. As the first example consider a stochastic twist map that is defined to be a stationary ergodic twist map on a planar strip. As a natural question, I discuss the fixed point of such maps and address a Poincare-Birkhoff type theorem. As the second example I consider stochastic flows associated with diffusions and discuss those diffusions which produce symplectic maps only in average sense. Using stochastic diffusions, it is possible to derive Iyer-Constantin Circulation Theorem for Navier-Stokes Equation.