PARISA FATHEDDIN, Ohio State University, Marion

Asymptotic Behavior of Stochastic Navier-Stokes and Schrodinger Equations

We will consider the stochastic Navier-Stokes and stochastic Schrodinger equations and discuss their asymptotic limits such as large and moderate deviations, central limit theorem and the law of the iterated logarithm. To achieve the large deviation principle, we apply both techniques available in the literature: Azencott method and the weak convergence approach and compare the two methods. The Azencott method is then used to derive the law of the iterated logarithm. Also I will discuss my recently published book for graduate students: "Teaching and Research in Mathematics: A Guide with applications to Industry".