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Parisa Fatheddin* (fatheddin.1@osu.edu) and **Zhaoyang Qiu** (zhqmath@163.com). *Large Deviations for Stochastic Schrodinger and Navier-Stokes Equations.*

We consider two main techniques to prove the large deviation principle: weak convergence approach and the classical Azencott method. The weak convergence approach is applied to obtain large deviations for one-dimensional stochastic Schrodinger equation and then the Azencott method is used to prove the theory for the two dimensional incompressible stochastic Navier-Stokes equation. The Friedlin-Wentzell inequality derived in the Azencott method enables us to establish the Strassen's Compact Law of the Iterated Logarithm. Exit problems are also discussed as applications. (Received December 31, 2020)