1173-60-9 **Parisa Fatheddin***, 1465 Mt Vernon Ave, Suite 301, Marion, OH 43302, and **Zhaoyang Qiu** (`zhqmath@163.com`), Wuhan, 430074, China, Wuhan, 430074, Peoples Rep of China. *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 June 20, 2021)