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Zhenghe Zhang* (zhenghe.zhang@ucr.edu), Department of Mathematics, Surge 202, University of California, Riverside, 900 University Avenue, Riverside, CA 92521. *Large deviation estimates in spectral analysis of some ergodic Schrödinger operators.*

Lyapunov exponent plays a key role in the spectral analysis of one dimensional ergodic Schrödinger operators, which arise naturally in modeling the motion of quantum particles in a disordered medium. In particular, some type of uniform large deviation estimates (LDT) for the Lyapunov exponent is one of main ingredients in showing the so-called Anderson Localization phenomenon, which in physics corresponds to insulate behavior. In this talk, I will try to describe some different mechanisms that lead to uniform LDT for some different type of ergodic Schrödinger operators. (Received September 12, 2017)