Large deviation principle of SDEs with non-lipschitzian coefficients

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Abstract:In this talk, we will give sufficient conditions such that the large deviation principle of stochastic differential equations with non-Lipschitzian and non-homogeneous coefficients holds. We consider at first the large deviation principle when the coefficients σ, b are bounded, then we generalize the conclusion to unbounded case by using bounded approximation program. Our results are generalization of the results of Fang and Zhang.