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Moderate Deviation Principles for Stochastic Differential Equations with Jumps.

We discuss moderate deviation principles for stochastic differential equations driven by a Poisson random measure (PRM) in finite and infinite dimensions. A main motivation is for use in the design of accelerated Monte Carlo schemes. In comparison with the corresponding large deviation result, the upper bound is in some ways more difficult. Proofs are based on a variational representation for expected values of positive functionals of a PRM. (Received January 18, 2015)