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Authors:	<a href="#">Srivastava, Anubhav Kumar.</a>
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Abstract:	This thesis aims at making the readers familiar with the concepts of stochastic re- setting and the advantages that it brings in terms of search problems and modeling of various biological and chemical processes. We discuss the physical model of dif- fusion of a Brownian particle with and without resetting and what advantages we see in the former case. Then, we shift our focus to the model of stochastic resetting acting on a quantum system and observe the novel steady state dynamics there. The question arises that what if the resetting process itself is quantum in nature, i.e. the resetting and unitary evolution operations are in a superposition. This is the model that we have proposed, and we observe the results that we get in this case and the quantum advantage that we observe. We also look at the future directions in which we can make use of this model.
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