**Open quantum systems with superposition of trajectories**

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In this work, we consider a superposition-of-trajectories scenario, where an open quantum system can simultaneously interact with multiple environments in a manner of quantum superposition. We show that this approach can be used to mitigate quantum decoherence effect. In addition, when considering infinitely many trajectories, a state freezing phenomenon occurs. Moreover, we demonstrate that the freezing effect can be investigated under a unified framework of standard quantum Zeno effect induced by repeated measurements.