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Counterfactual Assessment of Decoherence in Quantum Systems
ONOFRIO RUSSO, New Jersey Institute of Technology, LIANG JIANG, Yale University — Quantum Zeno effect occurs when the system is observed for unusually short observation times, t, where the probability of the transition between different quantum states is known to be proportional to t^2. This results in a decrease in the probability of transitions between states and the consequent decrease in decoherence. We consider the conditions in which these observations are made counterfactual to assess whether this results in a significant change in decoherence.

Liang Jiang
Yale University

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