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A study of two qubits system with Quantum operator formalism

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An open system, which consists of the decay of the excited state of two two-level atoms due to the stimulated emission of photons, has been studied in the quantum operator formalism. The Kraus operators are constructed to describe the time evolution of the composite system in terms of the interaction Hamiltonian between atoms and the electric field (a vacuum cavity that can generate photons). Afterward, we will apply the Kraus operators to derive the density matrix for analyzing the stability of the entanglement of two qubits system.

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