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## A study of two qubits system with Quantum operator formalism

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A two-qubit system is studied in the quantum operator formalism to analyze the open system consisting of two atoms in a cavity. The evolution of an open system is usually described in the Kraus representation which is constructed by considering a large closed system. In this work, we consider the short time scale of the evolution of systems in terms of interaction Hamiltonian. We focus on the construction of the Kraus operators, which results in the density matrix to support the master equation. This allows analyze the stability of the entanglement of two qubits system.

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