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Study of decoherence in a system of superconducting flux-qubits interacting with an ensemble of electrons

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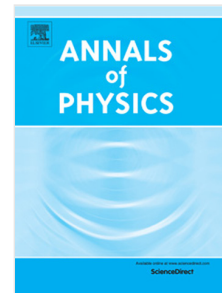
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Highlights

1

- The degree of coherence in a hybrid system ,composed of superconducting flux qubits and an electron ensemble, is analysed.
- The time evolution of the hybrid system is solved exactly and discussed in terms of the reduced density matrix of each subsystem.
- It is shown that the initial state of the system evolves to a stationary squeezed state.

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