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Non-Hermitian approach to the dissipative dynamics of two-level system

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Abstract content
 (Max 300 words)

We show how to simulate dissipative dynamics of a two-level system by means of a general non-Hermitian spin Hamiltonian. The linear non-Hermitian dynamics of the density matrix is transferred onto the observables of interest so that averages can be calculated according to the Schrodinger picture. We integrate the model analytically and adjust the parameters so that the Hermitian part's evolution would not only stay singular-free but also obey the properties we want to implement.

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