

Oleg Kulyashov

Title: Non-stationary qubit states' evolution in probability representation of quantum mechanics

Abstract:

The von Neuman equation for the qubit state density matrix is mapped onto the kinetic equations for probability distributions identified with the qubit states. In terms of these distributions known analytical solutions are analyzed: evolution of the probability distributions and of their Shannon and Tsallis entropies is demonstrated. The distributions are also used to describe (numerically) a special case of non-Hermitian evolution of a qubit.