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Short title:

MR Number: 2670526

Primary classification: 82C10

Secondary classification(s): 81Q50 93C95

Review text:

In the context of the driven quantum systems and of their linear-response theory (LRT) the authors successfully looked for circumstances where the standard Kubo formula ceased to be applicable, i.e., where the diffusion D proved anomalous (which means: Planck-constant-dependent). The emergence of the nonlinear dependence of D on the driving intensity is attributed to self-generated (intrinsic) dephasing processes and given the quantitative form of eq. (10). An illustration is provided via toy models (19) and (20). In Figure 2 one finds that certain two alternative forms of the violation of the LRT response may occur. The picture itself is to be read with necessary care since the “fast-track” speed of this publication caused certain unfortunate misprints in its legend.