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Title: Non-Hermitian interaction picture

Abstract:

The traditional interaction picture alias Dirac picture which is widely used in quantum field theory calculations was recently extended to form an innovative and promising crypto-Hermitian interaction picture (CHIP). The well known features taken from conventional approach (in which both the wave functions and the operators of observables vary with time) are combined with innovations (due to which the mathematics as well as the phenomenological menu become richer). A compact review of the formalism will be complemented by a few schematic illustrations of potential applications involving some counterintuitive aspects of dynamics near exceptional points.