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Short title: Numerical signatures of non-self-adjointness in quantum Hamiltonians.

MR Number: 2823450

Primary classification: 81Q12

Secondary classification(s): 47A05 47A58 65L06 81T25 81Q05 46N50

Review text:

One of the best, exceptionally accessible introduction into the problems with non-self-adjointness in quantum mechanics. Presented in the context of their “numerical signatures”, via two examples. The first one is pedagogical and methodical. It is solvable, contrasting the operators of kinetic energy and momentum and delivering the main message: In the finite-matrix simulations exemplified here by the Runge-Kutta-type N-point discretization, the property of non-self-adjointness of the continuous-limit operators may be often deduced from a pseudoconvergence of the eigenvalues or, even better, from the divergence of the eigenvectors with increasing N. The second, physics-oriented illustrative example deals with the one-dimensional KleinGordon Coulombic states. It shows that numerically, one can succeed here in the approximate detection and localization of the critical-charge-boundary change of status. Cleverly, the majority of technical details - forming one third of the text and developed in explicit detail - is stored in appendices.