Mathematical Physics

Generalized Nonanalytic Expansions, PT-Symmetry and Large-Order Formulas for Odd Anharmonic Oscillators

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The concept of a generalized nonanalytic expansion which involves nonanalytic combinations of exponentials, logarithms and powers of a coupling is introduced and its use illustrated in various areas of physics. Dispersion relations for the resonance energies of odd anharmonic oscillators are discussed, and higher-order formulas are presented for cubic and quartic potentials.

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