

From the nonrelativistic Morse potential to a unified treatment of a large class of bound-state solutions of a modified D-dimensional Klein-Gordon equation

A large class of bound-state solutions of a modified D-dimensional Klein-Gordon equation, featuring an additional vector interaction nonminimally coupled, is obtained from the nonrelativistic bound-state solutions of the one-dimensional generalized Morse potential via Langer transformation. Some results found in the literature, including the so-called Klein-Gordon oscillator, are obtained as particular cases.

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