

Marching toward the eigenvalues: The Canonical Function Method and the Schrödinger equation

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The Canonical Function Method (CFM) is a powerful accurate and fast method that solves the Schrödinger equation for the eigenvalues directly without having to evaluate the eigenfunctions. Its versatility allows to solve several types of problems and in this work it is applied to the solution of several 1D potential problems, the 3D Hydrogen atom and the Morse potential.

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