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Review text:

Compact presentation of an apparently new use of Bogoliubov - Valatin transformation in solving the problem of evolution of a time-dependent pair of quantum harmonic oscillators with a p-x coupling. In effect, the method reduces the construction of the evolution operator into a solution of the Cauchy initial-value problem for the four decoupled ordinary differential equations of second order. This immediately leads to the closed formulae for the time-dependence of wave functions and/or of any observable quantity. For illustration, the evolution of the Gaussian wave packet is described and discussed in full detail. Finally, the generality of the whole method is underlined.