

Abstract

In the present paper, the system of damped and coupled harmonic oscillators is studied, taking into account the exponential change in time of the masses. This problem is a result coming from the generalization of Hamiltonian theory of Caldirola. The study is carried out both in the Schrodinger and the Heisenberg picture, and both pictures yield the same result for the propagator of the damped harmonic oscillator. The Heisenberg picture is more appropriate for the description of the system, because it gives the real time evolution of the position and momentum operators.