
Mathematical and computer modeling of mechanical oscillations

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One of the urgent problems of modern education – integration of computer science with other disciplines, in particular the use of information technologies in teaching physics. The article considers working data of the computer program which enables to simulate different types of mechanical oscillations: harmonic, damped and forced oscillations. The program employs the mathematical model in the form of differential equations with initial conditions. The program allows the user to fully describe and visualize the process of mechanical oscillations.

Keywords: *mechanical oscillations, mathematical modeling, computer simulation, computer program, differential equations.*

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