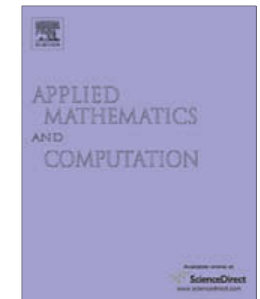




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## Approximation of solutions for an initial and terminal value problem for the forced Duffing equation with non-viscous damping

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### ABSTRACT

An algorithm to find explicit approximate solutions of an initial and terminal value problem for the forced Duffing equation with non-viscous damping is accomplished via a generalized quasilinearization method. In fact, we obtain a monotone sequence of approximate solutions converging uniformly and quadratically to a unique solution of the problem.

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