## KINGDOM OF SAUDI ARABIA

Ministry of Higher Education

# **KING ABDULAZIZ UNIVERSITY**

**Faculty of Science** 



# Ahmad, B., Alsaedi, A. Existence of approximate solutions of the forced Duffing equation with discontinuous type integral boundary conditions

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Department of Mathematics, Faculty of Science, King Abdulaziz University, P.O. Box. 80203, Jeddah, 21589, Saudi Arabia

## Abstract

We develop a generalized quasilinearization technique to obtain a sequence of approximate solutions converging monotonically and quadratically to the unique solution of the forced Duffing equation with discontinuous type integral boundary conditions. © 2007 Elsevier Ltd. All rights reserved.

#### **Author Keywords**

Duffing equation; Integral boundary conditions; Quadratic convergence; Quasilinearization

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