ON THE EXISTENCE OF PERIODIC SOLUTIONS OF A CERTAIN CLASS OF SECOND ORDER NONLINEAR DIFFERENTIAL EQUATION

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Abstract. A second order nonlinear differential equation is considered. Leray-Schauder principle is used to show the existence of periodic solutions. The results obtained are then applied to a specific example, where a computer program based on the fourth order Runge-Kutta method and Newton-Raphson algorithm is used to compute the periodic solutions.

Key words and phrases: Periodic solutions, differential equations.

REFERENCES