

AN EXISTENCE-UNIQUENESS THEOREM FOR A CLASS OF BOUNDARY VALUE PROBLEMS

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Abstract. In this paper the solutions of a two–endpoint boundary value problem is studied and under suitable assumptions the existence and uniqueness of a solution is proved. As a consequence, a condition to guarantee the existence of at least one periodic solution for a class of Liénard equations is presented.

Key Words and Phrases: Nonlinear boundary value problem, Liénard equation, periodic solution, Banach space, Schauder’s fixed point theorem.

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