

ANTI-PERIODIC BOUNDARY VALUE PROBLEM FOR NONLINEAR FIRST ORDER ORDINARY DIFFERENTIAL EQUATIONS

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Abstract. We prove several new existence results for a nonlinear anti-periodic first order problem using a Leray-Schauder alternative. Two definitions of lower and upper solutions are presented and we show in this paper the validity of the lower and upper solution method. Also, we give a method to generate a sequence of approximate solutions converging to a solution of the anti-periodic problem.

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