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Boundary value problems for semilinear evolution inclusions: Carathéodory selections approach

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Abstract: In this paper we prove two existence theorems for abstract boundary value problems controlled by semilinear evolution inclusions in which the nonlinear part is a lower Scorza-Dragoni multifunction. Then, by using these results, we obtain the existence of periodic mild solutions.

Keywords: semilinear differential inclusion, selection theorem, mild solution, lower Scorza Dragoni multifunction, mild periodic solution.

AMS Subject Classification: Primary 34A60, 34G20

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