

## A TOPOLOGICAL PROPERTY OF SOLUTION SETS OF SEMILINEAR DIFFERENTIAL INCLUSIONS

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**Abstract.** We consider a Cauchy problem for a semilinear differential inclusion involving a non-convex set-valued map and we prove that the set of selections corresponding to the solutions of the problem considered is a retract of the space of integrable functions on unbounded interval. A similar result is provided for a class of second-order differential inclusions.

**Key Words and Phrases:** differential inclusion, decomposable set, retract.

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