

Tolstonogov, A. A.

Extremal selections of multivalued mappings and the "bang-bang" principle for evolution inclusions. (English. Russian original) [Zbl 0784.54024](#)

Sov. Math., Dokl. 43, No. 2, 481-485 (1991); translation from *Dokl. Akad. Nauk SSSR* 317, No. 3, 589-593 (1991).

The author presents a theorem on the existence of continuous selections of multivalued mappings having the Scorza-Drăgăni property. Applications to the question of existence as well as some properties of extremal solutions of certain classes of evolution inclusions in Banach spaces are also given. The facts are announced without proofs.

Reviewer: [K.Nikodem \(Bielsko-Biala\)](#)

MSC:

- [54C65](#) Selections in general topology
- [34A60](#) Ordinary differential inclusions
- [54C60](#) Set-valued maps in general topology
- [49J30](#) Existence of optimal solutions belonging to restricted classes (Lipschitz controls, bang-bang controls, etc.)

Cited in **2** Reviews
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Keywords:

differential inclusion; continuous selections; multivalued mappings; Scorza-Drăgăni property; evolution inclusions; Banach spaces