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*On noncompact perturbation of nonconvex sweeping process*

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**Abstract:** We prove a theorem on the existence of solutions of a first order functional differential inclusion governed by a class of nonconvex sweeping process with a noncompact perturbation.

**Keywords:** nonconvex sweeping process, functional differential inclusion, uniformly  $\rho$ -prox-regular sets

**AMS Subject Classification:** 34A60, 34B15, 47H10

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