

EXISTENCE OF VIABLE SOLUTIONS FOR A CLASS OF  
NONCONVEX DIFFERENTIAL INCLUSIONS WITH MEMORY

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**Abstract.** We prove the existence of viable solutions for an autonomus differential inclusion with memory in the case when the multifunction that define the inclusion is upper semicontinuous compact valued and contained in the Fréchet subdifferential of a  $\phi$ -convex function of order two.

**MSC 2000.** 34A60.

**Key words.** Differential inclusion with memory,  $\phi$ -convex function of order two, viable solutions.

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Received September 29, 2005

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