

## ON SECOND-ORDER FUNCTIONAL DIFFERENTIAL INCLUSIONS IN HILBERT SPACES

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*Abstract.* We prove the existence result of monotone solutions, in Hilbert space, for the differential inclusion  $\dot{x}(t) \in f(t, T(t)x, \dot{x}(t)) + F(T(t)x, \dot{x}(t))$ , where  $f$  is a Carathéodory single-valued mapping and  $F$  is an upper semicontinuous set-valued mapping with compact values contained in the Clarke subdifferential  $\partial_c V(x)$  of a uniformly regular function  $V$ .

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