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A method for reparameterizing mild solutions to nonlinear evolution equations. (English)

Zbl 0694.35081

J. Differ. Equations 75, No. 2, 187-205 (1988).

Existence of solutions of evolution differential equation $u'(t) + A(t)u(t) \ni 0$, $u(0) = x_0$ where $A(t)$ is a multivalued m -accretive operator in a Banach space X is discussed in the case when a solution to $v'(t) + B(t)v(t) \ni 0$, $v(0) = x_0$ is known to exist and A and B are related by $A(t) = r(t)B(t)$ with $r(t)$ positive and integrable.

Reviewer: S.Tersian

MSC:

35G10 Initial value problems for linear higher-order PDEs

35K25 Higher-order parabolic equations

34G99 Differential equations in abstract spaces

35K55 Nonlinear parabolic equations

Keywords:

mild solutions; m -accretive operator

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References:

- [1] Crandall, M.G; Evans, L.C, On the relation of the operator $\sigma + \tau$ to evolution governed by accretive operators, Israel J. math., 21, 261-278, (1975) · [Zbl 0351.34037](#)
- [2] Crandall, M.G; Pazy, A, Nonlinear evolution equations in Banach spaces, Israel J. math., 11, 57-94, (1972) · [Zbl 0249.34049](#)
- [3] Craven, B, Lebesgue measure and integral, (1982), Pitman MA · [Zbl 0491.28001](#)
- [4] Evans, L.C, Nonlinear evolution equations in an arbitrary Banach space, Israel J. math., 26, 1-42, (1977) · [Zbl 0349.34043](#)
- [5] {M. A. Freedman}, Further investigation of the relation of the operator $\sigma + \tau$ to evolution governed by accretive operators, [Houston J. Math.](#), to appear. · [Zbl 0811.35172](#)

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