Integral solutions to a class of nonlocal evolution equations

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Abstract
We study the existence of integral solutions to a class of nonlinear evolution equations of the form

\[
\begin{aligned}
&u'(t) + A(u(t)) \ni f(t, u(t)), \quad t \in (0, T), \\
&u(0) = g(u),
\end{aligned}
\]

where \( A : D(A) \subseteq X \rightarrow 2^X \) is an \( m \)-accretive operator on a Banach space \( X \), and \( f : [0, T] \times X \rightarrow X \) and \( g : C(0, T; X) \rightarrow D(A) \) are given functions.

We obtain sufficient conditions for this problem to have a unique integral solution. This is joint work with Jesús García Falset.

Wednesday, March 31st
3:15pm
Room 380-380W

http://math.stanford.edu/~andras/PDE/PDE.html