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Periodic solutions of some evolution equations with infinite delay. (English) Zbl 1123.35084
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Summary: We study the existence of periodic solutions for some partial functional differential equations with infinite delay. We assume that the linear part is not necessarily densely defined and satisfies the Hille-Yosida condition, and the phase space is chosen to be C_g for some decreasing function g from $(-\infty, 0]$ to $[1, \infty)$. We also present a related Massera type result, namely the existence of a bounded solution on \mathbb{R}^+ implies the existence of a periodic solution.

MSC:

35R10 Functional partial differential equations

35B10 Periodic solutions to PDEs

Cited in **3** Documents

Keywords:

measure of non-compactness; condensing map; partial functional differential equation with infinite delay; existence of periodic solutions; Hille-Yosida condition