Maslowski, Bohdan; **Seidler, Jan**; **Vrkoč, Ivo**

An averaging principle for stochastic evolution equations. II. (English) Zbl 0786.60084

Math. Bohem. 116, No. 2, 191-224 (1991).

Summary: [For part I, by the second and third author, see Čas. Pěstovani Mat. 115, No. 3, 240-263 (1990; Zbl 0718.60068).]

Integral continuity theorems for solutions of stochastic evolution equations of parabolic type on unbounded time intervals are established. For this purpose, the asymptotic stability of stochastic partial differential equations is investigated, the results obtained being of independent interest. Stochastic evolution equations are treated as equations in Hilbert spaces within the framework of the semigroup approach.

MSC:

60H15 Stochastic partial differential equations (aspects of stochastic analysis)
93E15 Stochastic stability in control theory

Keywords:

stochastic evolution equations; asymptotic stability; stochastic partial differential equations; semigroup approach

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