

Persistence in Forward Nonautonomous Systems of Parabolic Equations

Dedicated to Professor Russell Johnson on the occasion of his 60th birthday

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Abstract. In the present paper forward nonautonomous systems of two parabolic second order partial differential equations are studied. The concept of forward uniform persistence for such systems is introduced. Sufficient conditions, expressed in terms of the principal spectrum, are given for those systems to be forward uniformly persistent.

Key words. Forward nonautonomous system of parabolic equation, system of parabolic equations of Kolmogorov type, principal spectrum, forward uniform persistence.

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