

Forward asymptotic behaviour of positive solutions in a non-autonomous logistic equation*

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Abstract

The goal of this communication is to study the forward dynamics of positive solutions for the non-autonomous logistic equation $u_t - \Delta u = \lambda u - b(t)u^p$, with $p > 1$, $b(t) > 0$, for all $t \in \mathbb{R}$, $\lim_{t \rightarrow \infty} b(t) = 0$. While the pullback asymptotic behaviour for this equation is simple and well-known, several different possibilities are realized in the forward asymptotic regime.

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