
XINGFU ZOU, University of Western Ontario

Impact of map dynamics on the dynamics of the associated delay reaction diffusion equation with Neumann condition

We are concerned with the dynamics of a class of delay reaction diffusion equation with a parameter μ . By letting $\mu \rightarrow +\infty$, such an equation is formerly reduced to an interval dynamical system. With the help of the famous Sarkovskii's theorem, we obtain some new yet simple sufficient conditions that assure the global stability of the delayed reaction diffusion equation with the parameter. We also give several examples to illustrate our main results.

This is a joint work with Taishan Yi.