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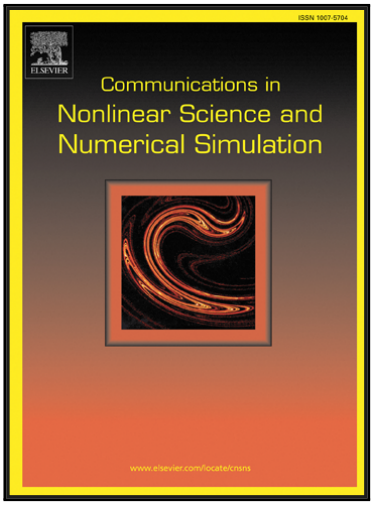

Detection of Turing patterns in a three species food chain model via amplitude equation

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Highlights

- Tri-trophic food chain model with self-diffusion is studied.
- Turing patterns are observed for suitable choice of parameters.
- Weakly nonlinear analysis is used to find the amplitude equations.
- Turing patterns are detected near Turing bifurcation boundary.
- Numerical simulations are used to validate the analytical results.

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