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A spatially structured metapopulation model within a stochastic environment

Andrew G. Smith

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Highlights

- Patch dynamics that vary stochastically are introduced into a metapopulation model.
- A law of large numbers with two scalings is applied to the metapopulation model.
- The LLN shows the metapopulation model is approximated by a piecewise deterministic Markov process.
- Conditions for extinction of the piecewise deterministic Markov process are derived.

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