

# First passage time on pattern formation in a non-local Fisher population dynamics

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## **Resumen**

We use stochastic dynamics to develop the patterned attractor of a non-local extended system. This is done analytically using the stochastic path perturbation approach scheme, where a theory of perturbation in the small noise parameter is introduced to analyze the random escape of the stochastic field from the unstable state. Emphasis is placed on the specific mode selection that these types of systems exhibit. Concerning the stochastic propagation of the front we have carried out Monte Carlo simulations which coincide with our theoretical predictions.

## **Palabras clave**

**Palabras clave de autor:** mean first passage time; non-local interactions; pattern formation