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Noise induced stabilization in population dynamics[1]

ALEX KAMENEV, University of Minnesota

We investigate a model where strong noise in a sub-population creates a metastable state in an otherwise unstable two-population system. The induced metastable state is vortex-like, and its persistence time grows exponentially with the noise strength. A variety of distinct scaling relations are observed depending on the relative strength of the sub-population noises.

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