

**A new observation concerning Turing's diffusion-driven instability
and spatial patterning**

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Abstract: The famous Turing's idea concerning diffusion-driven instability and spatial patterns with applications in biology will be recalled. Our theoretical results which show an influence of certain unilateral terms (special sources and sinks) to bifurcation of spatial patterns together with numerical experiments lead to the following general questions: Is a usual definition of a spatial pattern as a stationary spatially non-homogeneous solution satisfactory, and is a classical notion of stability/instability optimal in connection with spatial patterning? Some ideas in this direction will be discussed.