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Target Pattern Waves in a Specific Reaction-Diffusion Equation

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Abstract: This paper uses two-timing to solve a class of reaction-diffusion equations of Oregonator and constructs formally stable target pattern solutions to leading term in small parameter, which can be used to account for some observed experimental facts. In addition, it also gives the explicit expression of the period corresponding to the target waves.

PACS: 82.40.Fp, 87.90.+y, 47.70.Fw, 82.40.Bj Key words: excitable media, target wave, perturbation method, Oregonator

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