

Asymptotics and uniqueness of travelling waves for non-monotone delayed systems on 2D lattices

Zhi-Xian Yu¹ and Ming Mei^{2,3,*}

¹*College of Science, University of Shanghai for Science and Technology
Shanghai, 200093, China*

`yzx34114220163.com`, `yuzx0902@yahoo.com.cn`

and

²*Department of Mathematics, Champlain College Saint-Lambert
Saint-Lambert, Quebec, J4P 3P2, Canada*

³*Department of Mathematics and Statistics, McGill University
Montreal, Quebec, H3A 2K6, Canada*

`mmei@champlaincollege.qc.ca`, `mei@math.mcgill.ca`

Abstract

Established here is asymptotics and uniqueness (up to translation) of travelling waves for delayed 2D lattice equations with non-monotone birth functions. First of all, with the help of Ikehara's Theorem, the *a priori* asymptotic behavior of travelling wave is exactly derived, then based on the obtained asymptotic behavior, the uniqueness of the traveling waves is further proved. These results complement earlier results in the literatures.

Keywords. 2D lattice systems; traveling waves; asymptotic behavior; uniqueness; nonmonotone nonlinearity

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*Corresponding author.