

课程介绍

As regards the propagation of fronts for solutions of the reaction-diffusion system, there exists a rich literature on the cooperate system and the competition system, for which the comparison principle still hold. However, much less is known about the spreading properties for systems for which the comparison principle does not hold, apart from some recent works such as:

【1】 A. Ducrot, T. Giletti and H. Matano, Spreading speeds for multidimensional reaction-diffusion systems of the prey-predator type,

【2】 Ryunosuke Mori and Dongyuan Xiao, Spreading properties of a three-component reaction-diffusion model for the population of farmers and hunter-gatherers.

In this talk, we are going to introduce the limit system argument, which is useful to estimate the long time behavior of solutions of such systems.