

國立中正大學數學系
暨應用數學碩士班、統計科學碩士班
學 術 演 講

Pattern Dynamics Appearing on Compact Metric Graph

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Abstract

The study of reaction-diffusion equations on metric graph has been drawing attention recently. Here, we focus on pattern dynamics on compact metric graphs. There are eight different types of compact metric graphs which are constructed from two or three finite intervals. And we consider systems of reaction-diffusion equations on these compact metric graphs with natural boundary conditions. Suppose additionally the system has Turing or Wave instability. Then, by choosing the length of the segment intervals appropriately we have a degenerate situation, where we can use Fourier expansion. This enables us the normal form analysis to determine the local bifurcation structure around the bifurcation point.

日 期:113 年 4 月 24 日(星期三) 16:10~17:00

地 點:本校數學館 527 教室 (嘉義縣民雄鄉大學路 168 號)

茶 會: 15:30~16:00 數學館四樓 409 室舉行

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