

國立陽明交通大學應用數學系 學術演講公告

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講 題：Hybrid bifurcations: Periodicity from Eliminating a Line of
Equilibria

時 間：114 年 5 月 6 日(星期二) 下午 14:00 –15:00

地 點：(光復校區) 科學一館 213 室

Abstract

We describe a new mechanism that triggers periodic orbits in smooth dynamical systems. To this end, we introduce the concept of hybrid bifurcations, which consists of a bifurcation without parameters and a classical bifurcation. Our main result classifies the hybrid bifurcation when a line of equilibria with an exchange point of normal stability vanishes. We showcase the efficacy of our approach by proving stable periodic coexistent solutions in an ecosystem of two competing predators with Holling's type II functional response. This is a joint work with Alejandro López Nieto, Phillip Lappicy, Nicola Vassena, and Hannes Stuke.

敬請公告 歡迎參加

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