

高等教育深耕計畫-引領永續未來創新學院

【前瞻領域學程】系列講座

講者：**戴佳原**博士(國家理論中心)

講題：**Ginzburg-Landau Spiral Waves in Circular and Spherical Geometries**

時間：**2019年5月27日(星期一)下午2：30～3：30**

地點：**應數系多媒體教室(理學院408室)**

摘要

My talk consists of two parts.

Part 1 is a 10-minute ignite talk, in which I exhibit several beautiful spiral patterns, explain two mechanisms that trigger spiral waves, and introduce three mathematical viewpoints to treat spiral waves.

Part 2 focus on Ginzburg-Landau spiral waves and I solve the existence problem of spiral waves in the circular and spherical geometries. The methodology is twofold. First, I establish a proper functional approach for bifurcation analysis. Second, I use the method of shooting curves to extend all bifurcation curves globally. Then I highlight my ongoing research on linear stability of spiral wave solutions and discuss whether stability changes under effect of noninvasive spatio-temporal delay.

主辦單位：國立高雄大學統計學研究所、應用數學系

協辦單位：國立高雄大學巨量資料研究中心

高大交通資訊：<http://intro.nuk.edu.tw/nuk/map01.htm>