國立交通大學應用數學系
學術演講公告

主講人：戴佳原博士(國家理論科學研究中心)

講　題：Spiral Waves in the Circular and Spherical Geometries: the Ginzburg-Landau Paradigm

時　間：107 年 10 月 9 日(星期二) 下午 14:00 –15:00

地　點：(光復校區) 科學一館 223 室

茶　會：當天下午 1:30 (科學一館 205 室)

Abstract

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. Instead of applying the shooting method in the literature, I establish a functional approach and generalize the known results of existence for rigidly-rotating spiral waves. Moreover, I prove the existence of two new patterns: frozen spirals in the circular and spherical geometries, and 2-tip spirals in the spherical geometry.

敬請公告　歡迎參加

應用數學系　啟