

# 國立陽明交通大學應用數學系

## 學術演講公告

主講人：洪盟凱教授(中央大學數學系)

講題：Global classical nozzle flows near or away from vacuum states

時間：113 年 5 月 7 日(星期二) 下午 14:00 –15:00

地點：(光復校區) 科學一館 223 室

### Abstract

In this talk, we consider some nonlinear hyperbolic systems of balance laws near resonance. We focus on the classical solutions near or away from vacuum state (resonance) to the compressible Euler equations for either isentropic or non-isentropic flows through non-uniform ducts. We establish the global existence of classical solutions for both cases. By the normalization of systems, maximum principle, generalized Lax transformation and the detail study of Riccati equations, we are able to obtain uniformly bounded  $C^1$  norms of those solutions. The asymptotic behavior of solutions is also studied.

This series of projects are the joint works with Hsin-Yi Lee, Jay Chu, Ying-Chieh Lin, Shih-Wei Chou and Shih-Ming Wang.

敬請公告 歡迎參加

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