

## 冬季研究成果報告

Date: 2022/2/10 (Thu.)

Venue: R515, NCTS (Cosmology Bldg., NTU)

本活動歡迎所有大學部、  
研究所師生參與。

10:00-10:25

Around Multiple Norm One Tori

Speakers: 洪梵雲(NTU)、黃俊皓(NTNU)

Mentor: 余家富

10:25-10:50

The Local-global Principles-Hasse-Minkowski Theorem  
and Grunwald-Wang Theorem

Speakers: 李永丞(NTU)、劉耀聰(NTU)

Mentor: 李庭諭

11:00-11:30

Time-Frequency Analysis and Dimension Reduction

Speakers: 邱能泰(NYCU)、郝嘉誠(NYCU)、  
蘇彥維(NYCU)

Mentor: 劉聚仁

11:30-11:45

Heart Rate Variability

Speaker: 王如如(NCTS)

Mentor: 吳浩樺

11:45-12:00

PNP Steric Model and its Pattern Exploring

Speaker: 陳祁安(NCTS)

Mentor: 林太家

13:00-13:30

K3 Surfaces: Cohomology, Lattices and Torelli's  
Theorem

Speakers: 陳沅綦(NTU)、蘇品丞(NTU)、  
陳毅鴻(NTU)

Mentor: 陳榮凱

13:30-13:45

A Heat Kernel Proof of Demailly's Morse Inequalities

Speaker: 蘇爽(NCTS)

Mentor: 蕭欽玉

13:45-14:00

Deformation Quantization and Toeplitz Operators

Speaker: 張晉嘉(NCTS)

Mentor: 蕭欽玉

14:10-14:35

Introduction to Synchrosqueezed Chirplet Transforms

Speakers: 顏逸儒(NTU)、張詠信(NTU)

Mentor: 沈俊嚴

14:35-15:00

The Model of Random Matrices in Non-commutative  
Probability Theory

Speakers: 蕭明(NTU)、周子涵(NCCU)

Mentor: 黃皓璋

15:20-15:35

Galois Groups of Some Iterated Polynomials over Real  
Quadratic Number Field with Odd Class Number

Speaker: 高智強(NCTS)

Mentor: 魏福村

15:35-15:50

Four-points Symbolic Semidefinite Programming Bounds  
for Equiangular Lines

Speaker: 高暉竣(NCTS)

Mentor: 俞韋巨

15:50-16:05

Introduction to Poisson Structures

Speaker: 張華焯(NTHU)

Mentor: 廖軒毅

16:15-16:30

The Inverse Scattering and Riemann-Hilbert Problem

Speaker: 姜鈞(NSYSU)

Mentor: 黃信元

16:30-16:45

Phase Transitions of Spectral Initializations and some  
Numerical Simulations

Speaker: 王淑瑄(NCHU)

Mentor: 陳鵬文

16:45-17:00

The Controllability of Chemical Reaction Systems in Living  
Cells

Speaker: 黃雍晉(NCTS)

Mentors: 蔡志強、謝志豪