



# Meet with Prof. Chenyang Xu

**Date** | 2026/04/02

**Venue** | R515, Cosmology Bldg., NTU

## Course Outline & Descriptions

The purpose of this event is to invite distinguished mathematicians to introduce important problems and recent developments in their areas of expertise.

We hope that this event will inspire participants and deepen their understanding of mathematics.

## Invited Speakers

**Chenyang Xu**

Princeton University

**Ching Jui Lai**

National Cheng Kung University

**Chenyang Xu** Title: **Forty years of higher dimensional geometry**

## Abstract

I will survey major developments of higher dimensional geometry in the last forty years. I will focus on two intertwining topics: minimal model program and moduli theory of higher dimensional varieties.

**Ching Jui Lai** Title: **On slope unstable Fano varieties (joint work with Yen-An Chen)**

## Abstract

A conjecture attributed to Iskovskikh claims that the tangent bundle of a Picard rank one Fano manifold is slope stable. While Peternell, Wiśniewski, and Hwang proved this for dimensions up to five, Kanemitsu disproved it in 2021. To fill this gap, we employ foliated birational geometry to study the maximal destabilizing sheaf of the tangent sheaf of a Fano variety. In dimension two, we achieve a complete classification of  $(-K)$ -slope unstable weak del Pezzo surfaces with canonical singularities, recovering the well-known result that  $P^1 \times P^1$  and  $F_1$  are the only  $(-K)$ -slope unstable nonsingular del Pezzo surfaces. Furthermore, we find a del Pezzo surface with type A singularities that supports a weak Kähler-Einstein metric, yet its tangent sheaf remains slope unstable.

## Agenda

14:00~14:45

Survey talk by Prof. Xu

15:00~15:45

Research talk by Prof. Lai

16:00~16:30

Q&A with researcher and students

## Organizers

**Jungkai Chen**

National Taiwan University

**Ming-Lun Hsieh**

National Taiwan University

**Ching Jui Lai**

National Cheng Kung University

**Contact** Peggy Lee [peggylee@ncts.tw](mailto:peggylee@ncts.tw)



Event QR-Code