

中央研究院數學研究所

Institute of Mathematics, Academia Sinica

Taipei Postdoc Seminar

Speaker : 林學庸 博士 Dr. Hsieh-Yung Lin
(University of Bonn)

Title : *Some pieces of frontiers between symplectic, Kahler, and algebraic geometry*

Abstract :

Here is a foretaste of the kind of frontiers that we will discuss in the talk.

1)

If we forget the complex structure of a Kähler manifold X , we obtain a symplectic manifold. Unlike Kähler manifolds, deforming symplectic manifolds is much more easier. Accordingly many invariants of X coming from its Kähler or algebraic geometry disappear whenever we deform X symplectically. Are there invariants which still survive?

2)

A compact Kähler manifold X carries an algebraic structure precisely when it can be embedded into a projective space (called projective manifold). This time deforming X as a Kähler manifold is easier than deforming it as an algebraic variety. Can we obtain every compact Kähler manifold by deforming a projective manifold as a Kähler manifold?

Time : 11:00 – 12:30, Wednesday, Sep. 6, 2017

Venue : Room 638, Astro-Math. Building (NTU Campus)

Organizer : Chih-Wei Chen (NCTS), Jyun-Ao Lin (Academia Sinica)

Refreshment : 10:30

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2017.08.29