

中央研究院數學研究所

Institute of Mathematics, Academia Sinica

Sinica-NCTS Seminar on Geometry and Several Complex Variables

Speaker : 饒勝教授 Prof. Sheng Rao
(武漢大學 Wuhan University)

Title : Power series proofs for local stabilities of Kähler and balanced structures with mild $\partial\bar{\partial}$ -lemma

Abstract :

By use of a natural map introduced recently by Quanting Zhao and the speaker from the space of pure-type complex differential forms on a complex manifold to the corresponding one on the small differentiable deformation of this manifold, we will give a power series proof for Kodaira-Spencer's local stability theorem of Kähler structures. We also obtain two new local stability theorems, one of balanced structures on an n -dimensional balanced manifold with the $(n-1, n)$ -th mild $\partial\bar{\partial}$ -lemma by power series method and the other one on p -Kähler structures with the deformation invariance of (p, p) -Bott-Chern numbers. This talk is based on a recent work arXiv: 1609.05637v1 joint with Xueyuan Wan and Quanting Zhao.

Time : 10:30 –, Friday, Jan. 20, 2017

Venue : 中研院數學所 617 研討室(台大校區)

Seminar Room 617, Institute of Mathematics (NTU Campus)

Refreshment : 10:00

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2017.01.16