



*Institute of Mathematical Research
Department of Mathematics*

GEOMETRY SEMINAR

Deformation of holomorphic maps onto projective manifolds

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Abstract

Let X be a projective manifold and $\text{Aut}(X)$ be the automorphism group of X . We say that all holomorphic maps onto X are rigid modulo automorphism if for any family of holomorphic maps $f_t: Y \rightarrow X$, $t \in \Delta$, from a projective variety Y onto X , there exists $\gamma_t \in \text{Aut}(X)$ such that $f_t = \gamma_t \circ f_0$. The rigidity of surjective holomorphic map had been studied in a series of works by Hwang and others. Among other results, Hwang and Mok proved that all holomorphic maps onto X are rigid modulo automorphism when X is a Fano manifold of Picard number 1 and the variety of minimal rational tangents of X is non-linear or finite. We will also discuss the case when X is a Fano manifold of dimension 2 or 3 and of higher Picard number.

Date:	December 5, 2008 (Friday)
Time:	4:00 - 5:00pm
Place:	Room 517, Meng Wah Complex, HKU

All are welcome