



Institute of Mathematical Research
HKU



Department of Mathematics
HKUST



Department of Mathematics and IMS
CUHK

Hong Kong Geometry Colloquium

November 29, 2008 (Saturday)

Room 517, Meng Wah Complex, HKU

Professor Yuanlong Xin
Fudan University, Shanghai

Lawson-Osserman Problem via convex functions

10:00 – 11:00am

Abstract

We derive estimates of the Hessian of several smooth functions defined on Grassmannian manifold. Based on it, we can derive curvature estimates for minimal sub-manifolds of higher codimension in Euclidean space via Gauss map. Thus, Schoen-Simon-Yau's results and Ecker-Huisken's results for minimal hypersurfaces are generalized to higher codimension. In this way, the previous results for Lawson-Osserman problem done by Hildebrandt-Jost-Widmen and Jost-Xin could be improved.

11:00 – 11:20am

Tea Break

Professor De-Qi Zhang
National University of Singapore

Dynamics of automorphism groups of compact Kähler manifolds

11:20am – 12:20pm

Abstract

We show a Tits type (alternative) theorem about automorphism groups. Building blocks of automorphisms of positive entropy will also be discussed.

This meeting is hosted by the Institute of Mathematical Research, HKU.

All are Welcome