



*Institute of Mathematical Research  
Department of Mathematics*

## **GEOMETRY SEMINAR**

# ***J*-holomorphic curves in almost complex manifolds with asymptotically cylindrical ends**

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UCLA & CUHK

Date: September 23, 2013 (Monday)

Time: 3:30 – 4:30pm

Venue: Room 210, Run Run Shaw Bldg., HKU

### **Abstract**

Almost complex manifolds with asymptotically cylindrical ends (ACMAC) arise naturally in the study of symplectic field theory. In this talk, I will introduce its definition and some basic examples. Then I will explain the behaviors of  $J$ -holomorphic curves in ACMAC. Finally, I will give a very basic application of the previous results to show that for any  $J$ -holomorphic curve in a symplectic manifold, the pre-image number of a fixed point is uniformly bounded by its area.

*All are welcome*