THE UNIVERSITY



OF HONG KONG

Institute of Mathematical Research Department of Mathematics

## LECTURE SERIES

# Foliations, Rigidity and Nevanlinna Theory

### **Professor Nessim Sibony**

Université de Paris Sud, Orsay

#### Abstract

I will discuss the construction of *dd<sup>c</sup>*-closed currents associated to Pfaff systems, in particular to foliations by Riemann Surfaces. They are the starting point for the study of the dynamics of foliations. The emphasis will be on unique ergodicty results, which can be interpreted as rigidity results in Nevanlinna's theory. If time permits, I will discuss an analogous rigidity result for cohomology classes associated to automorphisms of positive entropy on a compact Kähler surface.

Lecture 1:	December 8, 2015 (Tuesday) 4:00 – 5:30pm
Lecture 2*:	December 12, 2015 (Saturday) 10:00 – 11:00am
Lecture 3:	December 14, 2015 (Monday) 4:00 – 5:30pm
Lecture 4:	December 15, 2015 (Tuesday) 4:00 – 5:30pm

#### Room 210, Run Run Shaw Bldg., HKU

\* Lecture 2 is given as Hong Kong Geometry Colloquium with the title "Unique ergodicity for foliations in P<sup>2</sup> with an invariant curve"

All are welcome