



*Institute of Mathematical Research  
Department of Mathematics*

## LECTURE SERIES

# Integrable subspaces of jet differentials

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### Abstract

A number of recent active topics in several complex variables, such as hyperbolicity of generic hypersurfaces of high degree, the abundance conjecture, and the subelliptic estimates of the complex Neuman problem for weakly pseudoconvex domains, all require the study of properties of integrable subspaces of jet differentials, for example, their algebraicity and their maximum dimensions. In many cases the jet differentials occur or are constructed in the context of a holomorphic family of complex manifolds or spaces. We will discuss the history, techniques, results, and unsolved problems in these topics involving integral subspaces of jet differentials.

Colloquium Lecture:	July 16, 2012 (Monday) 4:00 – 5:00pm
Lecture 2:	July 17, 2012 (Tuesday) 3:00 – 4:30pm
Lecture 3:	July 19, 2012 (Thursday) 3:00 – 4:30pm
Lecture 4:	July 20, 2012 (Friday) 3:00 – 4:30pm

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

*All are welcome*