THE UNIVERSITY   **OF HONG KONG**

LECTURE SERIES

Differential Relations of Multiplier Ideal Sheaves and Kohn's Algorithm for the Complex Neumann Problem

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Abstract

Multiplier ideal sheaves are introduced to measure the location and the jet order of the failure of *a priori* estimates in regularity problems of partial differential equations. The key tool is the differential relations of multiplier ideal sheaves involving differentiation in the good directions, along which a priori estimates hold. We will discuss the background, motivation, known results, open problems concerning the techniques of differential relations of multiplier ideal sheaves, especially in the context of Kohn's algorithm for the complex Neumann problem.

Colloquium Lecture:	June 23, 2017 (Friday) 4:00 – 5:00pm
Lecture 2:	July 3, 2017 (Monday) 3:30 – 5:00pm
Lecture 3:	July 4, 2017 (Tuesday) 3:30 – 5:00pm

Room 210, Run Run Shaw Bldg., HKU

All are welcome