

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research*

*Department of Mathematics*

# LECTURE SERIES

## Multiplier Ideal Sheaves for General Systems of Partial Differential Equations

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Distinguished Visiting Professor, HKU

### Abstract

Joe Kohn in 1979 introduced the techniques of multiplier ideal sheaves to blaze a trail in applying algebraic geometric methods to study the regularity of the Kohn solution of the complex Neumann problem for weakly pseudoconvex domains. In this talk we will present the generalization of the techniques of multiplier ideal sheaves to general systems of partial differential equations. We will also discuss the motivations and the roles of regularity questions and multiplier ideal sheaves in the broader context of problems in algebraic and complex geometry.

Colloquium Lecture:	October 24, 2016 (Monday)	4:00 – 5:00pm
Lecture 2:	October 27, 2016 (Thursday)	3:30 – 5:00pm
Lecture 3:	October 31, 2016 (Monday)	3:30 – 5:00pm

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

*All are welcome*