

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research  
Department of Mathematics*

# COLLOQUIUM

## The past, present and future of several complex variables II

**Professor Yum-Tong Siu**

William Elwood Byerly Professor, Harvard U.  
Distinguished Visiting Professor, HKU

### **Abstract**

For the study of analysis and function theory the most natural setting is several complex variables. Since its initial development more than a hundred years ago the theory of several complex variables has gone through several distinct stages of development with the use of very different techniques. One theme common throughout its development is the problem of constructing complex-analytic objects: functions, maps, coherent sheaves and their sections, etc. The talk will start with a survey from scratch, requiring minimal background knowledge. It will then progress to a discussion of current unsolved problems, available techniques, and approaches being developed for their solutions. Problems selected for discussion include hyperbolicity problems, the complex Neumann problem, effective results in algebraic geometry, the abundance conjecture and related questions.

Date: May 23, 2016 (Monday)

Time: 4:00 - 5:30pm

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

*All are welcome*