THE UNIVERSITY



Institute of Mathematical Research Department of Mathematics

# COLLOQUIUM

### Uniformization theorem of Riemann surfaces revisited in view of its role in some recent developments in complex geometry

## **Professor Yum-Tong Siu**

#### William Elwood Byerly Professor, Harvard U., USA and C.V. Starr Visiting Professor, HKU

#### Abstract

The uniformization theorem of Riemann surfaces limits the possibilities of a simply connected Riemann surface to the Riemann sphere, the Gaussian plane, and the disk. Since the time of Riemann many ideas were introduced and many techniques developed for its understanding and its rigorous proof. This talk revisits the historic development of the ideas and techniques from the viewpoint of their generalizations and applications to some recent developments in algebraic and complex geometry such as the construction of nonsingular ball quotients of finite volume and the abundance conjecture.

Date: July 15, 2010 (Thursday)

Time: 4:00 – 5:00pm

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

All are welcome