

IAS Distinguished Lecture

L-function: Its past and future

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Date : 30 January 2018 (Tuesday)

Time : 3:30pm – 5:00pm (*Light refreshments will be served from 3:00pm to 3:30pm*)

**Venue : Connie Fan Multi-media Conference Room, 4/F,
Cheng Yick-chi Building, City University of Hong Kong**



Abstract

In this lecture, Professor Zhang will introduce the history of 2500 years in searching a formula for finite sums

$$1^k + 2^k + \dots + n^k$$

which lead to work of Euler on infinite sums

$$1^k + 2^k + \dots + n^k + \dots$$

Professor Zhang will explain how the game of calculus unfold some secrets of primes in a series work of Euler, Dirichlet, and Riemann in 18-19 century. And describe how the study of L-function becomes a central topic in 20-21 century of number theory under framework of Langlands program and arithmetic geometry.

Biography

Prof Shou-Wu Zhang received his PhD from Columbia University in 1991. He was a member of the Institute for Advanced Study in Princeton and an Assistant Professor at Princeton University from 1991 to 1996. He has been tenured at Columbia University since 1996 and at Princeton University since 2011.

Prof Zhang's research areas include number theory and arithmetic algebraic geometry. He is on the editorial boards of the Algebra and Number Theory, Forum of Mathematics, and Science in China, among other publications.

Prof Zhang was an invited speaker of the International Congress of Mathematicians at Berlin in 1998 and was awarded a Morningside Gold Medal of Mathematics in the same year by the International Congress of Chinese Mathematicians for his work on the Bogomolov conjecture and Gross-Zagier formula. He received the Guggenheim Foundation Fellowship in 2009 and was elected to be a fellow of American Academy of Arts and Sciences in 2011.



All are welcome

Online registration: www.cityu.edu.hk/ias/event

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