

SMS Public Lecture

An overview and revisiting on mathematics and civilization- from Pythagoras to Newton

Wu-Yi Hsiang
UC Berkeley and HKUST

Date: Thursday, October 7, 2010
Time: 4:00 – 5:00 p.m.
Venue: LT 31, S16, Faculty of Science
National University of Singapore

Abstract

A brief survey of the history of sciences, from Pythagoras to Newton, will show that the major developments are mainly in Geometry, Astronomy and Physics, and the following triple are their respective great achievements and outstanding monuments, namely

- 1) The foundation of quantitative geometry (Hippasus, Eudoxus)
- 2) The new astronomy (Copernicus, Tycho, Kepler)
- 3) Mathematical principle of natural philosophy (Newton)

In this talk, we shall provide an overview on the historical background that led to the above monumental successes and we shall also revisit some of the above great breakthroughs with new insights and simpler ways of achieving those discoveries.

About the speaker

Prof Wu-Yi Hsiang was born in China, studied in Taiwan and received his Ph.D from Princeton University. He first moved to the University of Chicago, before becoming a professor at the University of California, Berkeley. He is now Professor Emeritus at both UC Berkeley and the Hong Kong University of Science and Technology. Professor Hsiang's research interests include differential geometry, transformation groups, classical geometry and celestial mechanics.

