Institute for Mathematical Sciences

Ng Kong Beng Public Lecture Series

黄光明公开讲座

Foundations of mathematics: an optimistic message

Speaker: Stephen G. Simpson
Pennsylvania State University, USA

Date: 6 January 2016

Time: 6:30 - 7:30 pm

Venue: LT31, Block S16, Level 3
Faculty of Science
National University of Singapore
10 Lower Kent Ridge Road Singapore 117546

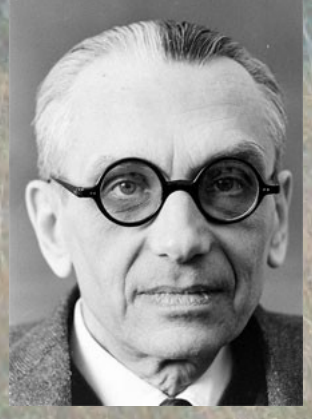
Plato and Aristotle

"The infinite! No other question has ever moved so profoundly the spirit of man."

-- David Hilbert (1862-1943)

About the Speaker

Stephen G. Simpson is a senior mathematician and mathematical logician. He is prominent as a researcher in the foundations of mathematics. His writings have been influential in promoting the foundations of mathematics as an exciting research area.



"Objective concepts of mathematics are fundamental to my work in logic."

-- Kurt Gödel (1906-1978)

Abstract

Historically, mathematics has been regarded as a role model for all of science -- a paragon of abstraction, logical precision, and objectivity. The 19th and early 20th centuries saw tremendous progress. The great mathematician David Hilbert proposed a sweeping program whereby the entire panorama of higher mathematical abstractions would be justified objectively and logically, in terms of finite processes. But then in 1931 the great logician Kurt Gödel published his famous incompleteness theorems, thus initiating an era of confusion and skepticism. In this talk I show how modern foundational research has opened a new path toward objectivity and optimism in mathematics.

Free Admission

For more information, visit www2.ims.nus.edu.sg and www.math.psu.edu/simpson/talks/nus1601/.

Kurt Gödel. 17 November 2015. Online image. Retrieved from http://guncelmatematik.com/kurt-godel-kimdir.html
David Hilbert. 17 November 2015. Online image. Retrieved from http://davidhilbertmth482.blogspot.in/
Plato and Aristotle. 24 November 2015. Online image. Retrieved from https://en.wikipedia.org/wiki/Philosophy#/media/File:Sanzio_01_Plato_Aristotle.jpg

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