



中央研究院數學研究所
Institute of Mathematics
Academia Sinica

國立台灣大學數學系
Department of Mathematics
National Taiwan University

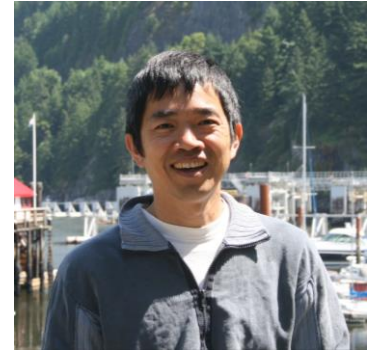


Lakeside Lectures

Speaker: Tai-Peng Tsai

(University of British Columbia)

Title: The Navier-Stokes regularity problem



Abstract:

Incompressible Navier-Stokes equations is the fundamental system of partial differential equations that models the motion of incompressible Newtonian fluids, e.g., water. For any smooth localized initial velocity field in \mathbb{R}^3 , there is a weak solution that exists for all time and is regular for short time. However its regularity for all time is a significant open problem. This is related to the question whether the Navier-Stokes system describes turbulence. In this talk I will try to explain the difficulty of this problem and partial results so far, to a general audience including beginning graduate students who know the heat equation.

Date: Nov. 18th, 2013

Time: 14:00-15:00

Venue: Room 202, Astro-Math Building

Refreshment: 13:30-14:00

Organizers: Yi-Chiuan Chen, Chen-Yu Chi, Chun-Chung Hsieh, Jeng-Daw Yu

