

One-Day Workshop on Navier-Stokes Equations and Related Topics

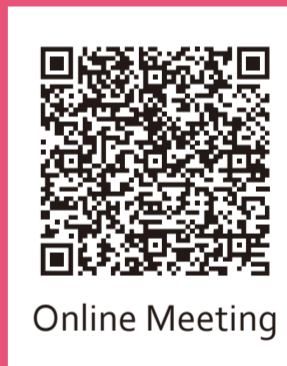
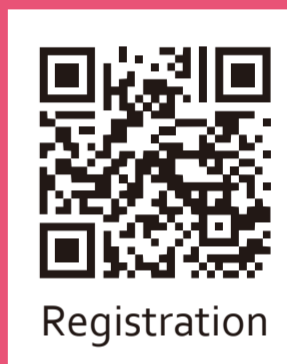
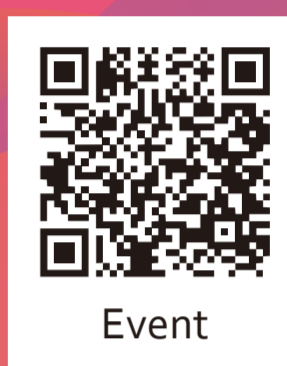
Date 2023.2.14

Date Room 515, Cosmology Building +Online Conference

Aim & Scope

This one-day workshop aims to bring researchers who are interested in the state-of-the-art development of the blowup problem of 3D Euler equations with smooth initial data. In particular, Professor Thomas Yizhao Hou from Caltech will give a thorough introduction to his recent breakthrough in this Millennium problem. Meanwhile, we also invite several domestic experts in related research fields to give speeches and have in-depth discussions with Professor Hou on his recent results. We believe that his visit creates a great opportunity for international academic exchange between scholars in related research fields and participating students.

The 3D Euler singularity problem is known to be extremely challenging. Many leading experts have worked on this problem for many years without success. Professor Hou with his research team has worked on this problem for many years. Recently, they finally resolved this long-standing open problem. Prof. Hou and his student, Dr. Jiajie Chen, just posted a manuscript on arXiv, <https://arxiv.org/abs/2210.07191>, "Stable nearly self-similar blowup of the 2D Boussinesq and 3D Euler equations with smooth data, Jiajie Chen, Thomas Y. Hou", in which they proved the finite time blowup of the 3D Euler equations with smooth initial data. This exciting result has already generated a lot of enthusiastic responses from the mathematics and physics/fluids communities. Many international leading PDE experts congratulated them on this breakthrough, including Charlie Fefferman, Terry Tao, Carlos Kenig, and Camilo De Lellis. etc. Meanwhile, Quanta Magazine plans to write a special report on this celebrated work.



Contact : Peggy Lee (peggylee@ncts.tw)

Plenary Speaker

Thomas Yizhao Hou Caltech University

Invited Speaker

Chi-Hin Chan National Yang Ming Chiao Tung University

Ming-Chih Lai National Yang Ming Chiao Tung University

Van Tien Nguyen National Taiwan University

Shih-Hsien Yu Academic Sinica

Organizer

Chiun-Chuan Chen National Taiwan University

Jann-Long Chern National Taiwan Normal University

Ming-Chih Lai National Yang Ming Chiao Tung University

Agenda

09:30-10:00	Registration
10:00-10:10	Opening
	Plenary talk I
10:10 - 11:10	Professor Yizhao Hou
11:20-12:10	Shih-Hsien Yu
12:10-13:30	Lunch
	Plenary Talk II
13:30-15:00	Professor Yizhao Hou

15:00-15:20	Tea Break
	Plenary Talk II
15:20-16:00	Nguyen Van Tien
16:05-16:45	Chi-Hin Chan
16:50-17:30	Ming-Chih Lai
18:30	Conference Dinner (Banquet, invitation only)