

The Institute of Mathematical Sciences
The Chinese University of Hong Kong

IMS PDE Workshop (Part I)
August 14, 2023 (Monday)

Venue: G03, G/F, Academic Building No. 1, CUHK

09:00 – 09:10 REGISTRATION

09:10 – 09:15 Opening Remarks by **Professor Zhouping XIN** (The Chinese University of Hong Kong)

Session Chair: Professor Zhouping XIN

09:15 – 10:00 **Professor Xulong QIN** (Sun Yat-Sen University)
Nonlinear Instability of Non-isentropic Fluid Flows

10:00 – 10:30 TEA

10:30 – 11:15 **Professor Dongjuan NIU** (Capital Normal University)
Global well-posedness of 3D Navier-Stokes equations with variable viscosity

Session Chair: Professor Renjun DUAN

11:15 – 12:00 **Professor Feng XIE** (Shanghai Jiao Tong University)
Sharp interface limit of the inhomogeneous incompressible Navier-Stokes/Allen-Cahn system in a bounded domain via a relative energy method

12:00 – 14:00 LUNCH

Session Chair: Professor Yinbin DENG

14:00 – 14:45 **Professor Jing WANG** (Shanghai Normal University)
Vanishing dissipation limit of solutions to initial boundary value problem for three dimensional incompressible magneto-hydrodynamic equations with transverse magnetic field

Session Chair: Professor Yaquang WANG

14:45 – 15:30 **Dr. Yue YAO** (The Chinese University of Hong Kong)
Studies on the Self-gravitating Gaseous Stars Based on the Pressureless Euler-Poisson system

15:30 – 15:45 GROUP PHOTO

15:45 – 16:15 TEA

Session Chair: Professor Tao LUO

16:15 – 17:00 **Dr. Chen GAO** (The Chinese University of Hong Kong)
Prandtl Boundary Layer in An Infinitely Long Convergent Channel

18:00 BANQUET