

IMS PDE Workshop (Part I)
January 26, 2024 (Friday)

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

Aim: The purpose of this forum is for experts in the field of nonlinear PDEs to communicate on recent developments in the area.

08:45 – 08:55 REGISTRATION

08:55 – 09:00 Opening Remarks by **Professor Zhouping XIN** (The Chinese University of Hong Kong)

Session Chair: Professor Zhouping XIN

09:00 – 09:45 **Professor Yinbin DENG** (Central China Normal University)
Existence of positive solution for a Critical Neumann problem in the half-space

Session Chair: Professor Yaquang WANG

09:45 – 10:30 **Professor Jian ZHANG** (University of Electronic Science and Technology of China)
Small Solitons and Multi-Solitons in Nonlinear Schrodinger Equations

10:30 – 11:00 GROUP PHOTO & TEA

Session Chair: Professor Renjun DUAN

11:00 – 11:45 **Professor Huicheng YIN** (Nanjing University)
On the global existence or blowup of weak solutions to the semilinear wave equations with time-dependent dissipation

11:45 – 14:00 LUNCH

Session Chair: Professor Tao LUO

14:00 – 14:45 **Professor Shijin DING** (South China Normal University)
Dynamics for liquid droplets and evaporation in inkjet printing of display thin films: Mathematical Modeling, problems and prospects

Session Chair: Professor Yachun LI

14:45 – 15:30 **Professor Xin ZHONG** (Southwest University)
Incompressible limit of three-dimensional isentropic compressible Navier-Stokes equations with discontinuous initial data

15:30 – 16:00 TEA

Session Chair: Professor Yong LI

16:00 – 16:45 **Professor Xumin GU** (Shanghai University of Finance & Economics)
Well-Posedness and Low Mach Number Limit of the Free Boundary Problem for the Euler-Fourier System

Session Chair: Professor Changjiang ZHU

16:45 – 17:30 **Professor Jinkai LI** (South China Normal University)
Local well-posedness of heat conductive compressible Navier-Stokes equations in the presence of vacuum without compatibility conditions

18:00 BANQUET