

Conference on Shock Waves and Related Topics

Date: 10-12 January 2026

Venue: Jan 10 & 11: Room P4701 (All Day)

Jan 12: 9:00 - 11:50: Room M4001

Day 1 --- 10 January 2026 (Saturday)

8:30 am - 8:40 am	WELCOME and OPENING
8:40 am - 10:10 am	Session Chair: Prof. Mikhail Feldman
8:40 am - 9:10 am	Prof. Myoungjean Bae Multi-dimensional Solutions to the Steady Euler-Poisson System
9:10 am – 9:40 am	Prof. Renjun Duan The Boltzmann equation in an infinite layer: spectrum and asymptotes toward the heat equation
9:40 am – 10:10 am	Prof. Jun Chen On the stability of contact discontinuities in Euler flows
10:10 am - 10:30 am	COFFEE BREAK
10:30 am - 12:00 am	Session Chair: Prof. Renjun Duan
10:30 am - 11:00 am	Prof. Beixiang Fang Asymptotic Analysis of Steady Viscous Shocks in a 1-D Finite Nozzle in the Small Viscosity Limit
11:00 am - 11:30 am	Prof. Zhu Zhang Unstable mode around the 3D boundary layer flow
11:30 am – 12:00 am	Prof. Gaowei Cao Formula for Entropy Solutions of the 1D Pressureless Euler-Poisson System: Well-Posedness of Entropy Solutions and the Asymptotic Behavior
12:10 pm - 2:00 pm	LUNCH BREAK
2:00 pm - 6:00 pm	Free Discussion

Day 2 --- 11 January 2026 (Sunday)

9:10 am - 10:10 am	Session Chair: Prof. Tao Luo
9:10 am - 9:40 am	Prof. Yi Wang Vanishing viscosity limit of two interacting shocks from same family to 1D compressible Navier-Stokes
9:40 am - 10:10 am	Prof. Xianpeng Hu Effects of viscosities of compressible fluid flows
10:15 am - 11:45 am	Session Chair: Prof. Xianpeng Hu
10:15 am - 10:45 am	Prof. Jun Li Formation of Burgers-type singularity for 1D hyperbolic equations
10:45 am - 11:15 am	Prof. Tao Wang Recent progress on the stability of plasma interfaces
11:15 am - 11:45 am	Prof. Hyangdong Park Three-dimensional supersonic flows for the steady Euler-Poisson system
12:00 pm - 2:00 pm	LUNCH BREAK
2:10 pm - 3:40 pm	Session Chair: Prof. Myoungjean Bae
2:10 pm - 2:40 pm	Prof. Hairong Yuan Hypersonic similarity law for steady compressible Euler flows past slender bodies within the framework of Radon measure solution
2:40 pm - 3:10 pm	Prof. Siran Li Global existence and large-time behaviour of weak solutions to the compressible barotropic Navier-Stokes Equations on \mathbb{T}^2 with density-dependent bulk viscosity: beyond the Van der Waals-Kazhikhov regime
3:10 pm - 3:40 pm	Prof. Xin Gao Transonic Shock Solutions with Large Swirl Velocity in a Finite Cylinder
3:40 pm - 4:00 pm	COFFEE BREAK
4:00 pm - 5:30 pm	Session Chair: Prof. Zongyuan Li
4:30 pm - 5:00 pm	Prof. Tian-Yi Wang On the Asymptotic Behavior of Irrotational Steady Euler Equations
5:00 pm - 5:30 pm	Prof. Jie Kuang Mathematical analysis on hypersonic similarity for steady flow
6:00 pm - 8:00 pm	Banquet

Day 3 --- 12 January 2026 (Monday)

9:10 am - 10:10 am	Session Chair: Prof. Hongyu Liu
9:10 am - 9:40 am	Prof. Chunjing Xie The existence and formation of shocks for classical solutions of rotating shallow water system
9:40 am - 10:10 am	Prof. Anthony Suen Ill/well-posedness of non-diffusive active scalar equations with physical applications
10:15 am - 11:45 am	Session Chair: Prof. Panpan Ren
10:15 am - 10:45 am	Prof. Teng Wang Planar stationary solution to initial boundary value problem for non-isentropic compressible Navier-Stokes equations in several dimensions
10:45 am - 11:15 am	Prof. Yun Pu On the Well-Posedness of an Inverse Piston Problem for Combustion Euler Flows
11:15 am - 11:45 am	Jiawen Zhang Global Regular Solutions of the Multidimensional Degenerate Compressible Navier-Stokes Equations with Large Initial Data of Spherical Symmetry
12:00 pm - 2:00 pm	LUNCH BREAK
2:00 pm - 6:00 pm	Free Discussion