

## Quantum and Kinetic Problems: Modeling, Analysis, Numerics and Applications

Forum 1: Nonlinear PDEs and Related Topics  
(26–30 December 2019)

Name & Affiliation	Talk Title
<a href="#">Yinbin Deng</a> Central China Normal University, China	Existence and asymptotic behavior of positive solutions for a class of quasilinear Schrödinger equations with parameters <a href="#">(PDF)</a>
<a href="#">Shijin Ding</a> China Normal University, China	Enhanced dissipation and transition threshold for the 3-D Poiseuille flow in a channel <a href="#">(PDF)</a>
<a href="#">Qin Duan</a> Shenzhen University, China	Local well-posedness of 3-d Full-Navier-Stokes equations with degenerated viscosity and far field vacuum <a href="#">(PDF)</a>
<a href="#">Zhenhua Guo</a> Northwest University, China	Global weak solutions to the three-dimensional compressible non-Newtonian fluid <a href="#">(PDF)</a>
<a href="#">Huai-Yu Jian</a> Tsinghua University, China	The optimal global regularity regularity for elliptic equations which is degenerate or singular on the boundary <a href="#">(PDF)</a>
<a href="#">Hailiang Li</a> Capital Normal University, China	Non-existence of finite energy solution to compressible Navier-Stokes equations <a href="#">(PDF)</a>
<a href="#">Jing Li</a> Nanchang University and Academia Sinica, China	Global existence of weak solutions to the barotropic compressible Navier-Stokes flows with degenerate viscosities <a href="#">(PDF)</a>
<a href="#">Jinkai Li</a> South China Normal University, China	Global small solutions for heat conductive compressible Navier-Stokes equations with vacuum <a href="#">(PDF)</a> <a href="#">(Video)</a>
<a href="#">Qing Nie</a> University of California, Irvine, USA	Data-driven multiscale modeling of cell fate dynamics
Dongjuan Niu Capital Normal University, China	Some recent results on incompressible flows with helical symmetry
<a href="#">Yaobin Ou</a> Renmin University of China, China	Rigorous derivation of non-isentropic Low Mach number Navier-Stokes equations in bounded domains <a href="#">(PDF)</a>
Changzheng Qu Ningbo University, China	Stability of non-smooth solitons to integrable systems <a href="#">(PDF)</a>
<a href="#">Chunpeng Wang</a> Jilin University, China	Smooth transonic flows in de Laval nozzles <a href="#">(PDF)</a>

Name & Affiliation	Talk Title
<a href="#">Xiaoming Wang</a> Southern University of Science and Technology, China	Convection in a coupled free-flow porous media flow system
<a href="#">Xiaoping Wang</a> Hong Kong University of Science and Technology, Hong Kong	Topology optimization, theory, numerical methods and applications ( <a href="#">PDF</a> ) ( <a href="#">Video</a> )
<a href="#">Yun Wang</a> Soochow University, China	Some progress in Leray's problem ( <a href="#">PDF</a> )
<a href="#">Yinhua Xia</a> University of Science and Technology of China, China	Invariant preserving discontinuous Galerkin methods for nonlinear wave equations ( <a href="#">PDF</a> )
<a href="#">Chunjing Xie</a> Shanghai Jiao Tong University, China	Analysis on steady compressible Euler system with both fixed and free boundaries ( <a href="#">PDF</a> ) ( <a href="#">Video</a> )
<a href="#">Feng Xie</a> Shanghai Jiaotong University, China	Verification of Prandtl boundary layer expansion for the steady electrically conducting fluids with a moving physical boundary
<a href="#">Zhouping Xin</a> The Chinese University of Hong Kong, Hong Kong	Subsonic and sonic jet flows ( <a href="#">PDF</a> ) ( <a href="#">Video</a> )
<a href="#">Wenging Xu</a> California State University, Long Beach, USA	On the vanishing viscosity limit for a 3-D system arising from the Keller-Segel model
Xiaoping Yang Nanjing University, China	The growth and nodal sets of solutions to some elliptic equations ( <a href="#">PDF</a> )
<a href="#">Liqun Zhang</a> Chinese Academy of Sciences, China	Continuous weak solutions of Boussinesq equations ( <a href="#">PDF</a> ) ( <a href="#">Video</a> )
Huijiang Zhao Wuhan University, China	Radially symmetric stationary waves for the exterior problem of multidimensional Burgers equation