Xinghong Pan

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Education

Nanjing University, PHD, Advisor: Huicheng Yin 2010.09 -- 2017.03

Nanjing University, Bachelor 2006.09 -- 2010.06

Work Experiences

School of Mathematics, Nanjing University of Aeronautics and Astronautics 2022.01 -- NOW

Associate Fellow

College of Science, Nanjing University of Aeronautics and Astronautics 2017.04 -- 2021.12

Lecture

Department of Mathemtatics, University of California, Riverside 2014.12 -- 2016.12

Joint PHD student Advisor: Qi S. Zhang

Department of Mathemtatics, University of California, Riverside 2013.01 -- 2013.03

Visiting student Visited Advisor: Qi S. Zhang

Research Interest

- Fluid dynamics in partial differential equations;
- nonlinear elliptic and parabolic PDEs, Navier-Stokes equations and related equations;
- Euler equations with damping.

Funding

- Study on the Properties of solutions to the Axially symmetric Navier-Stokes equations, NSFC Youth Program, 2019.01-2021.12, Host;
- Study on the Decay and Vanishing of D solutions to the Axially symmetric Navier-Stokes equations, NSF of Jiangsu Province Youth Program, 2018.07-2021.06£¬Host;
- Mathematical theory in dynamic Equations of High Reynolds Numbers and Macroscopic and Microscopic Fluid, NSFC Major Project, 2021.01-2025.12, Participation.

Honors

- Double Innovation Programs of Jiangsu Province, Doctor of Double Innovation, The Organization Department of the Central Committee of Jiangsu Province, 2019.01-2020.12.

Publication (Parts)

- Li, Zijin; **Pan, Xinghong**; One component regularity criteria for the axially symmetric MHD-Boussinesq system. *Discrete Contin. Dyn. Syst.* 42 (2022), no. 5, 2333¨C2353.
- Li, Zijin; **Pan, Xinghong**; A single-component BKM-type regularity criterion for the inviscid axially symmetric Hall-MHD system. J. Math. Fluid Mech. 24 (2022), no. 1, Paper No. 16, 19 pp.
- Dong, Hongjie; **Pan, Xinghong**; On conormal derivative problem for parabolic equations with Dini mean oscillation coefficients. *Discrete Contin. Dyn. Syst.* 41 (2021), no. 10, 4567¨C4592.
- **Pan, Xinghong**; Liouville theorem of D-solutions to the stationary magnetohydrodynamics system in a slab. *J. Math. Phys.* 62 (2021), no. 7, Paper No. 071503, 14 pp.
- **Pan, Xinghong**; Stability of smooth solutions for the compressible Euler equations with time-dependent damping and one-side physical vacuum. *J. Differential Equations* 278 (2021), 146¨C188.

- **Pan, Xinghong**; Global existence and convergence to the modified Barenblatt solution for the compressible Euler equations with physical vacuum and time-dependent damping. *Calc. Var. Partial Differential Equations* 60 (2021), no. 1, Paper No. 5, 43 pp.
- Carrillo, Bryan; **Pan, Xinghong**; Zhang, Qi S.; Zhao, Na; Decay and vanishing of some D-solutions of the Navier-Stokes equations. *Arch. Ration. Mech. Anal.* 237 (2020), no. 3, 1383¨C1419.
- Carrillo, Bryan; **Pan, Xinghong**; Zhang, Qi S.; Decay and vanishing of some axially symmetric D-solutions of the Navier-Stokes equations. *J. Funct. Anal.* 279 (2020), no. 1, 108504, 49 pp.
- Li, Zijin; **Pan, Xinghong**; On the vanishing of some D-solutions to the stationary magnetohydrodynamics system. *J. Math. Fluid Mech.* 21 (2019), no. 4, Paper No. 52, 13 pp.
- **Pan, Xinghong**; Xu, Jiang; Global existence and optimal decay estimates of the compressible viscoelastic flows in L^p critical spaces. *Discrete Contin. Dyn. Syst.* 39 (2019), no. 4, 2021¨C2057.
- Li, Zijin; **Pan, Xinghong**; Some remarks on regularity criteria of axially symmetric Navier-Stokes equations. *Commun. Pure Appl. Anal.* 18 (2019), no. 3, 1333¨C1350.
- **Pan, Xinghong**; Zhu, Lu; The combined quasineutral and low Mach number limit of the Navier-Stokes-Poisson system. *Z. Angew. Math. Phys.* 70 (2019), no. 1, Paper No. 29, 21 pp.
- **Pan, Xinghong**; Blow up of solutions to 1-d Euler equations with time-dependent damping. *J. Math. Anal. Appl.* 442 (2016), no. 2, 435¨C445.
- **Pan, Xinghong**; Regularity of solutions to axisymmetric Navier-Stokes equations with a slightly supercritical condition. *J. Differential Equations* 278 (2021), 146¨C188.
- **Pan, Xinghong**; Global existence of solutions to 1-d Euler equations with time-dependent damping. *Nonlinear Anal.* 132 (2016), 327¨C336.

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in MathSciNet, **in** arXiv, **in** Github, **in** ResearchGate