

Publications

Published / Accepted Journal Papers

1. Jingwei Hu, Kunlun Qi and **Tong Yang**, A new stability and convergence proof of the Fourier-Galerkin spectral method for the spatially homogeneous Boltzmann equation, to appear in SIAM Journal on Numerical Analysis.
2. Chengjie Liu, Yaguang Wang and **Tong Yang**, Study of boundary layers in compressible non-isentropic flows, to appear in Methods and Applications of Analysis.
3. Hailiang. Li, **Tong Yang** and Mingying Zhong, Diffusion limit of the Vlasov-Poisson-Boltzmann system, to appear in Kinetic and Related Models.
4. Wei-Xi Li, Nader Masmoudi and **Tong Yang**, Well-posedness in Gevrey function space for 3D Prandtl equations without structural assumption, to appear in Communications on Pure and Applied Mathematics.
5. Huanyao Wen, **Tong Yang**, Xinhua Zhao and Changjiang Zhu, Optimal convergence rate of the vanishing shear viscosity limit for compressible Navier-Stokes equations with cylindrical symmetry, to appear in Journal de Mathematique Pures et Appliquees. DOI 10.1016/j.matpur.2020.09.003.
6. Ricardo Alonso, Yoshinori Morimoto, Weiren Sun and **Tong Yang**, Non-cutoff Boltzmann equation with polynomial decay perturbation, Revista Matematica Iberoamericana, 37(2021), no. 1, 189-292.
7. Chengjie Liu, Dehua Wang, Feng Xie and **Tong Yang**, Magnetic effects on the solvability of 2D MHD boundary layer equations without resistivity in Sobolev spaces, Journal of Functional Analysis 279 (2020) 108637.
8. Hailiang Li, **Tong Yang** and Mingying Zhong, Green's function and pointwise space-time behavior of the Vlasov-Poisson-Boltzmann equation, Archive for Rational Mechanics and Analysis, 235, 1011-1057(2020).
9. Wei-xi Li and **Tong Yang**, Well-posedness in Gevrey function space for the Prandtl equations with non-degenerate critical points, Journal of European Mathematical Society, 22, 717-775 (2020).
10. Cheng-Jie Liu, Feng Xie and **Tong Yang**, Justification of Prandtl ansatz for MHD boundary layer, SIAM Journal on mathematical Analysis, 51(3), (2019), 2748-2791.
11. Hongjie Dong, **Tong Yang** and Mingying Zhong, Exterior problem of the linear Vlasov-Poisson-Boltzmann system, SIAM Journal on mathematical Analysis, 51(3), 1792-1823 (2019).
12. Xulong Qin, **Tong Yang**, Zhengan Yao and Wenshu Zhou, Vanishing shear viscosity limit and boundary layer study for the planar MHD system, Mathematical Models and Methods in Applied Sciences, 1139-1174 (2019).

13. Chengjie Liu, Feng Xie and **Tong Yang**, MHD boundary layers in Sobolev spaces without monotonicity. I. Well-posedness theory, *Communications on Pure and Applied Mathematics*, vol. LXXII, 0063-0121 (2019).
14. Xie Feng and **Tong Yang**, Lifespan of solutions to MHD boundary layer equations with analytic perturbation of general shear flow, *Acta Mathematicae Applicatae Sinica*, vol. 35, no. 1 (2019), 209-229.
15. Xie Feng and **Tong Yang**, Global-in-time stability of 2D MHD boundary layer in the Prandtl-Hartmann Regime, *SIAM Journal on Mathematical Analysis*, 50(6), 5749-5760(2018).
16. Yongting Huang, Chengjie Liu and **Tong Yang**, Local-in-time well-posedness for compressible MHD boundary layer, *Journal of Differential Equations*, 266(6), 2978-3013 (2019).
17. **Tong Yang** and Hongjun Yu, Global solution for the spatially inhomogeneous non-cutoff Kac equation, *SIAM Journal on Mathematical Analysis*, vol. 50, no. 4, 4503-4562 (2018).
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19. Hailiang Li, Yi Wang, **Tong Yang** and Mingying Zhong, Stability of nonlinear wave patterns to the bipolar Vlasov-Poisson-Boltzmann system, *Archive for Rational Mechanics and Analysis*, Vol. 228, no. 1, 39-127 (2018).
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21. Renjun Duan, Feimin Huang, Yong Wang and **Tong Yang**, Global Well-posedness of the Boltzmann equation with large amplitude initial data, *Archive for Rational Mechanics and Analysis*, vol. 225, no. 1, 375–424 (2017).
22. Renjun Duan, Yuanjie Lei, **Tong Yang** and Huijiang Zhao, The Vlasov-Maxwell-Boltzmann system near Maxwellians in the whole space with very soft potentials, *Communications in Mathematical Physics*, vol. 351, no. 1, 95–153 (2017).
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