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基本情况

籍贯：黑龙江 出生年月：1993年3月 政治面貌：中共党员

婚姻状况：未婚 健康状况：健康

工作经历

2022.5–至今 助理教授, 云南师范大学.

2019.9–2022.4 助理研究员, TV-L E13, 德国哥廷根大学.

2018.7–2019.6 研究助理, 云南师范大学.

合作导师：吴鲜教授、赵富坤教授

教育背景

2019.9–2022.4 博士, 基础数学, 德国哥廷根大学.

导师：Ingo Witt 教授

2015.9–2018.6 硕士, 基础数学, 云南师范大学.

导师：赵富坤教授

2011.9–2015.6 学士, 数学与应用数学, 哈尔滨师范大学.

研究兴趣

非交换调和分析、非线性分析、偏微分方程、幂零李群

学术兼职

欧洲数学会会员

美国数学评论(Mathematical Reviews) 评论员

德国数学文摘(zbMATH) 评论员

期刊审稿人: Applied Mathematics Letters

Complex Variables and Elliptic Equations

Journal of Geometric Analysis

Journal of Mathematical Physics

Mathematical Methods in the Applied Sciences

Zeitschrift für angewandte Mathematik und Physik

教学情况

本科 调和分析
研究生 偏微分方程、幂零李群

科研项目

- 2018.1-2021.12 国家自然科学基金面上项目, 非局部椭圆型方程(组)解的多重性及性态研究, 11771385, 参与.
- 2016.1-2017.12 云南师范大学研究生创新基金, 一类带有分数阶拉普拉斯算子的变分问题, yjs201677, 主持.
- 2013.1-2014.12 哈尔滨师范大学实践创新基金, 微分方程在化学反应模型中的应用, 主持.

获奖情况

- 2020 云南省优秀毕业论文, 云南师范大学.
- 2018 优秀毕业论文, 云南师范大学.
- 2017 云南省政府奖学金, 云南师范大学.
- 2017 伍达观奖学金, 云南师范大学.
- 2016 国家奖学金, 云南师范大学.
- 2015 优秀毕业生/优秀毕业论文, 哈尔滨师范大学.
- 2012/13/14 国家励志奖学金, 哈尔滨师范大学.

已发表文章

注: 共发表SCI论文15篇, 其中9篇第一作者, 6篇通讯作者*.

1. **Zhipeng Yang** and Fukun Zhao, Three solutions for a fractional Schrödinger equation with vanishing potential. *Appl. Math. Lett.* 76: 90-95, 2018.
JCR分区: 1区, 中科院分区: 大类1区.
2. **Zhipeng Yang**, Yuanyang Yu and Fukun Zhao, Concentration behavior of ground state solutions for a fractional Schrödinger-Poisson system involving critical exponent. *Commun. Contemp. Math.*, 21: no.6, 1850027, 2019.
JCR分区: 1区, 中科院分区: 大类3区.
3. **Zhipeng Yang**, Yuanyang Yu and Fukun Zhao, The concentration behavior of ground state solutions for a critical fractional Schrödinger-Poisson system with competing potentials. *Math. Nachr.*, 292: no.8, 1837-1868, 2019.
JCR分区: 2区, 中科院分区: 大类4区.
4. Shaoxiong Chen, Yue Li and **Zhipeng Yang***, Multiplicity and concentration of nontrivial nonnegative solutions for a fractional Choquard equation with critical exponent. *Rev.R.Acad.Cienc.Exactas Fís.Nat.Ser.A Mat. RACSAM.*, 114: no.1, 2020.
JCR分区: 1区, 中科院分区: 大类3区.

5. Tiankun Jin and **Zhipeng Yang***, The fractional Schrödinger-Poisson systems with infinitely many solutions. *J. Korean Math. Soc.*, 57: no.2, 489-506, 2020.
JCR分区: 4区, 中科院分区: 大类4区.

6. **Zhipeng Yang** and Yuanyang Yu, Geometrically distinct solutions of nonlinear elliptic systems with periodic potentials. *Arch. Math.*, 115: no.6, 703-716, 2020.
JCR分区: 4区, 中科院分区: 大类4区.

7. **Zhipeng Yang** and Fukun Zhao, Multiplicity and concentration behaviour of solutions for a fractional Choquard equation with critical growth. *Adv. Nonlinear Anal.*, 10: no.1, 732-774, 2021.
JCR分区: 1区, 中科院分区: 大类1区.

8. **Zhipeng Yang**, Wei Zhang and Fukun Zhao, Existence and concentration results for fractional Schrödinger-Poisson system via penalization method. *Electron. J. Differential Equations*, 2021: no.14, 1-31, 2021.
JCR分区: 2区, 中科院分区: 大类4区.

9. **Zhipeng Yang**, Fujita exponent and nonexistence result for the Rockland heat equation. *Appl. Math. Lett.*, 121: 107386, 2021.
JCR分区: 1区, 中科院分区: 大类1区.

10. Yongpeng Chen and **Zhipeng Yang***, Multiplicity of solutions for a class of critical Schrödinger-Poisson system with two parameters. *数学物理学报*, 41, no.6, 1750-1767, 2021.
中文核心期刊.

11. Guangze Gu and **Zhipeng Yang***, Positive eigenfunctions of a class of fractional Schrödinger operator with a potential well. *Differential Integral Equations*, 35: no1-2, 123-150, 2022.
JCR分区: 2区, 中科院分区: 大类3区.

12. Guangze Gu and **Zhipeng Yang***, On the singularly perturbation fractional Kirchhoff equations: Critical case. *Adv. Nonlinear Anal.*, 11: no.1, 1097-1116, 2022.
JCR分区: 1区, 中科院分区: 大类1区.

13. **Zhipeng Yang***, Non-degeneracy of positive solutions for fractional Kirchhoff problems: High dimensional cases. *J. Geom. Anal.*, 32:195, 2022.
JCR分区: 1区, 中科院分区: 大类2区.

14. Guangze Gu, Xianyong Yang and **Zhipeng Yang***, Infinitely many sign-changing solutions for nonlinear fractional Kirchhoff equations. (Accepted) *Applicable Analysis*, 2021.

15. **Zhipeng Yang***, Fukun Zhao and Shunneng Zhao, Existence and multiplicity of normalized solutions for a class of fractional Schrödinger-Poisson equations. (Accepted) *Annales Fennici Mathematici.*, 2022.

已投稿或在研文章

1. **Zhipeng Yang**, Weyl transform and Heat kernel of sub-Laplacian on step two nilpotent Lie groups. *submitted*, 2021.
2. **Zhipeng Yang**, Harmonic analysis on the step two nilpotent Lie group I: Hermite functions. *submitted*, 2021.
3. **Zhipeng Yang**, Harmonic analysis on the step two nilpotent Lie group II: Laguerre functions. *submitted*, 2021.
4. **Zhipeng Yang**, Critical Fujita exponent and blow-up results for the Rockland heat equation. *submitted*, 2021.
5. Ingo Witt and **Zhipeng Yang***, Weyl-Hörmander symbolic calculus on step two nilpotent Lie groups I: Basic properties. *submitted*, 2021.
6. Vicentiu D. Rădulescu and **Zhipeng Yang***, A singularly perturbed fractional Kirchhoff problem. *submitted*, 2021.
7. **Zhipeng Yang**, A note on the heat kernel for the rescaled harmonic oscillator from step two nilpotent Lie groups. *submitted*, 2021.
8. **Zhipeng Yang** and Yuanyang Yu, Critical fractional Kirchhoff problems: uniqueness and nondegeneracy. *submitted*, 2021.
9. Vicentiu D. Rădulescu and **Zhipeng Yang***, Local uniqueness of semiclassical bounded states for a singularly perturbed fractional Kirchhoff problem. *submitted*, 2021.
10. **Zhipeng Yang**, Local uniqueness of multi-peak positive solutions to a class of fractional Kirchhoff equations. *submitted*, 2021.

参加会议情况

- 2022.2 **Conference on Microlocal and Global Analysis in Geometry and Mathematical Physics**, *University of Potsdam*, Germany.
报告题目: Harmonic analysis on nilpotent Lie groups of step two.
- 2021.7 **International Conference on Nonlinear Analysis and Twenty-first Conference on Nonlinear Functional Analysis**, 云南师范大学, 昆明.
- 2021.2 **Conference on Microlocal and Global Analysis in Geometry and Mathematical Physics**, *University of Potsdam*, Germany.
- 2020.2 **Conference on Microlocal and Global Analysis in Geometry and Mathematical Physics**, *University of Potsdam*, Germany.
报告题目: Existence and concentration behavior of solutions for some fractional Schrödinger-Poisson systems.
- 2019.8 **Workshop on Dynamics of PDEs from Fluids and Nonlinear Waves**, 南京师范大学, 南京.
- 2019.6 **International Workshop on Nonlinear Analysis and Reaction-Diffusion equation**, 哈尔滨师范大学, 哈尔滨.
- 2019.5 **Workshop on Nonlinear Analysis and its Applications of Young Scholars**, 华中师范大学, 武汉.
- 2019.4 **Workshop on Emerging Areas in Reaction-diffusion Systems: Mathematical Theory and Applications to Physics, Biology and the Social Sciences**, 华东师范大学, 上海.