



## 师资队伍

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队伍概况

人员列表



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2020-05-08 11:24 审核人:

### 个人简介

长期从事广义相对论、以及黑洞物理学的研究工作，担任物理专业本科生《力学》和研究生《广义相对论》等教学工作。在国际国内重要刊物发表SCI学术论文60余篇。所发表的学术论文总被SCI文献引用1800多次。共计有6篇第一作者论文被SCI文献引用次数超100次，单篇最高

被引用277次。有2篇论文被诺贝尔奖得主F. Wilczek引用。曾主持国家自然科学基金面上项目3项，省自然科学基金一项；曾获教育部自然科学二等奖，广州市科学技术奖一等奖。特别是曾作为第一完成人，获国际奖“Thomson Reuters Research Fronts Award 2008”，以及中国物理学会2012年度“最有影响论文奖”一等奖。2014-2019年，连续6年进入Elsevier“中国高被引学者（Most Cited Chinese Researchers）榜单”。

### ■ 担任主要课程

本科生课程：力学

研究生课程：广义相对论

### ■ 主持课题

1. 高阶近似下黑洞热力学问题研究，国家自然科学基金面上项目（2019-2022）
2. 黑洞辐射正则系综模型及相关问题研究，国家自然科学基金面上项目（2013-2016）
3. 黑洞量子隧穿辐射与信息疑难以及黑洞半经典量子化方案，国家自然科学基金面上项目（2009-2011）

### ■ 参与课题

1. 全息纠缠熵的量子修正及其应用，国家自然科学基金青年项目（2019-2020）
2. 奇性困难与时间本质，国家自然科学基金青年项目（2005-2006）
3. 广义不确定原理与黑洞热力学，国家自然科学基金面上项目（2004-2006）

### ■ 主要论文（带\*号的为通信作者）

1. Tan, Hongwei; Yang, Jinbo; Zhang, Jingyi\*; The global monopole spacetime and its topological charge, CHINESE PHYSICS B 卷: 27 期: 3 文献号: 1674-1056(2018) 27:3<030401:TGMSAI>2.0.TX;2-C 出版年: MAR 2018
2. Tan, Hong-Wei; Yang, Jinbo; He, Tangmei; Zhang, Jingyi\*, A Modified Thermodynamics Method to Generate Exact Solutions of Einstein Equations, Communications in Theoretical Physics, Volume: 67, Issue: 1, Pages: 41-46, Published: JAN 1 2017
3. Yang, Jinbo; He, Tangmei; Zhang, Jingyi\*, Simple Harmonic Oscillator Canonical Ensemble Model for Tunneling Radiation of Black Hole, Entropy, 2016,18,415 Published: 23 November 2016
4. Yang, Jinbo; He, Tangmei; Zhang, Jingyi\*, Rindler-like Horizon in Spherically Symmetric Spacetime, International Journal of Theoretical Physics, Volume: 55, Issue:7,Pages: 3220-3225 Published: JUL 2016
5. Yan, Shi; He, Tang-Mei; Zhang, Jing-Yi\*, Corrected Stefan-Boltzmann Law and Lifespan of Schwarzschild-de-sitter Black Hole, Communications in Theoretical Physics, Volume: 65, Issue: 6, Pages: 731-734, Published: JUN 1 2016
6. Chen, Sina; Zhang, Jingyi\*, The Concrete Quantum Tunneling Spectrum of Reissner-Nordstrom Black Holes, International Journal of Theoretical Physics,Volume:55, Issue:3,Pages: 1652 -1657, Published: MAR 2016
7. He, Tangmei; Zhang, Jingyi; Yang, Jinbo; et al., Lifespan of rotating black hole in the frame of generalized uncertainty principle, Modern Physics Letters A, Volume: 31, Issue:3, Article Number: 1650008, Published: JAN 30 2016
8. Chen Si-Na; Zhang Jing-Yi\*. Concrete quantum tunneling spectrum of Schwarzschild black holes, Chinese Physics B,卷: 24,期: 2,文献号: 020401, 出版年: FEB 2015
9. Jingyi Zhang. Canonical Ensemble Model for Black Hole Radiation, Journal of Astrophysics and Astronomy 卷: 35 期: 3 特刊: SI 页: 573-575 出版年: SEP 2014
10. He Tang-Mei; Yang Jin-Bo; Zhang Jing-Yi\*. Corrected Stefan-Boltzmann Law and Lifespan of a Black Hole, Chinese Physics Letters, 卷: 31 期: 8 文献号: 080401 出版年: AUG 2014
11. Jingyi Zhang. Canonical Ensemble Model for the Black Hole Quantum Tunneling Radiation, Chinese Physics Letters, 卷: 30 期: 7 文献号: 070401 出版年: JUL 2013
12. Bai-sheng Liu, Jingyi Zhang\*. Discussion on Event Horizon and Quantum Ergosphere of Dynamic de Sitter Black Holes, Modern Physics Letters A, 27(2012)1250010.
13. Bai-sheng Liu, Jingyi Zhang\*. Discussion on the event horizon and quantum ergosphere of dynamic rotating black holes in a tunneling framework, Chinese Physics B, 21(2012)070402
14. Jingyi Zhang, Zheng Zhao, "Discussion on Event Horizon and Quantum Ergosphere of Evaporating Black Holes in a Tunnelling Framework", Physical Review D, 83(2011),064028
15. Jingyi Zhang, "Black Hole Entropy Calculation in a Modified Thin Film Model", Journal of Astrophysics and Astronomy, 32(2011) , 323–325

16. Bai-Sheng Liu, Jingyi Zhang\*, "Entropy Correction for Cosmological Horizon of Schwarzschild-de Sitter Black Holes", Communications in Theoretical Physics, 55(2011)804-806.
17. Jingyi Zhang, "Entropy correction of BTZ black holes in a tunneling framework" Sci China-phys Mech Astron,53(2010)p1427-1433
18. Jingyi Zhang, "Rediscussion on Black Hole Angular Momentum" International Journal of Theoretical Physics 49(2010)p224-231
19. Yiwen Han, Jingyi Zhang, "Hawking temperature and thermodynamics geometry of the 3D charged-dilaton black holes" Physics Letters B, 692(2010),p74-77,
20. Hu, Ya-Peng; Zhang, Jing-Yi; Zhao, Zheng. A NOTE ON THE HAWKING RADIATION CALCULATED BY THE QUASICLASSICAL TUNNELING METHOD. Modern Physics Letters A 卷: 25 期: 4 页: 295-308 出版年: FEB 10 2010
21. Jingyi Zhang, "Black hole entropy, log correction and inverse area correction" Physics Letters B, 675(2009),p14-17, (SCI, IF: 5.08)
22. Liang Zhou, Jingyi Zhang\*, "Tunneling Radiation of Charged and Magnetized Particles from the Reissner-Nordström-de Sitter Black Holes with Magnetic Charges" International Journal of Theoretical Physics 48(2009)p3213-3219
23. Tang-Mei He, Jingyi Zhang, "Tunneling Radiation from a Static Spherically Symmetric Black Hole Surrounded by Quintessence" Communications in Theoretical Physics, 52(2009)619-621
24. Jingyi Zhang, "Black hole quantum tunnelling and black hole entropy correction" Physics Letters B, 668(2008),p353-356,
25. Liang Zhou, Jingyi Zhang\*, "Massive Particles' de Sitter Tunneling in (3+1)-Dimensional de Sitter Spacetimes" Communications in Theoretical Physics, 50(2008)1258-1260
26. Jingyi Zhang, Jun-Hui Fan, "Tunnelling Effect of Charged and Magnetized Particles from the Kerr-Newman-Kasuya black hole," Physics Letters B, 648(2007),p133-138
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31. Yapeng Hu, Jingyi Zhang, Zheng Zhao, Massive Uncharged and Charged Particles' Tunneling from the Horowitz-Strominger Dilaton Black Hole, Int. J. Mod. Phys. D, 16(2007)847-856 (SCI)
32. Jingyi Zhang, Zheng Zhao, "Charged particles' tunneling form the Kerr-Newman black hole" Physics Letters B, 638(2006), p110-113.
33. Jingyi Zhang, Yapeng Huo, Zheng Zhao, "Information Loss in Black Hole Evaporation" Modern Physics Letters A, 21(2006),1865-1868.
34. Jingyi Zhang, Zheng Zhao, "New coordinates for the evaporating Vaidya black hole" Chinese Physics Letters, 23(2006)1099-1102.
35. Chenzhou Liu, Jingyi Zhang, Zheng Zhao, "Charged particles' tunneling form a dilation black hole" Physics Letters B, 639(2006), p670-674.
36. Yapeng Hu, Jingyi Zhang, Zheng Zhao, "Massive particles' Hawking radiation via tunneling from the G.H Dilaton black hole," Modern Physics Letters A 21(2006) 2143- 2149.
37. Ren Jun, Jingyi Zhang, Zheng Zhao, "Tunneling effect and Hawking radiation from a Vaidya black hole," Chinese Physics Letters, 23(2006)2019
38. Jingyi Zhang, Zheng Zhao, "Hawking radiation of charged particle via tunneling from the Reissner-Nordstrom black hole," Journal of High Energy Physics, JHEP10 (2005) Art No. 055.
39. Jingyi Zhang, Zheng Zhao, "Massive particle's black hole tunneling and de sitter tunneling, " Nuclear Physics B, 725(2005),p173-180.
40. Jingyi Zhang, Zheng Zhao, "New coordinates for Kerr-Newman black hole radiation," Physics Letters B, 618(2005), p14-22.
41. Jingyi Zhang, Zheng Zhao, "Hawking radiation via tunneling from Kerr black holes," Modern Physics Letters A, 20(2005), p1673-1681.
42. Jingyi Zhang, Zheng Zhao, "Hawking radiation of Dirac particles in a nonuniformly rectilinearly accelerating black hole, " General Relativity and Gravitation, 35(2003) 595-603.
43. Jingyi Zhang, "Hawking radiation of Dirac particles on Rindler horizon to a uniformly accelerating observer, " Communications in Theoretical Physics, 40(2003)244-246.

### ■ 出版专著/教材

刘辽, 赵峥, 田贵花, 张靖仪. 黑洞与时间的性质, 北京大学出版社, 北京: 2008 ("十一五"国家重点图书出版规划项目)

### ■ 获奖

- [1] 项目: "致密天体的理论与观测研究"获教育部高等学校自然科学奖二等奖; 获奖时间: 2010年. 获奖人: 樊军辉, 张靖仪, 张江水, 王洪光, 刘怡
- [2] 论文"New coordinates for Kerr-Newman black hole radiation" 获Thomson Reuters Research Fronts Award 2008; 获奖时间: 2008年. 获奖人: 张靖仪, 赵峥.
- [3] 项目: "致密天体的理论与观测研究"获广州市科学技术奖一等奖; 获奖时间: 2008年. 获奖人: 樊军辉, 张靖仪, 刘怡, 张江水, 王洪光, 林瑞光, 袁聿海.
- [4] 最有影响论文奖一等奖, 中国物理学会, 2012.9.22, 获奖人: 张靖仪

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