

**任继荣**

副教授

性别：男

理论物理专业硕士生导师
理论物理研究所

地址：兰州市天水南路222号，兰州大学物理科学与技术学院

电话：0931-8914275 传真：0931-8913554

电子邮件：renjr@lzu.edu.cn

个人简介：

任继荣，男，1973年9月生，博士，副教授，硕士生导师。1997年、2000年、2003年在兰州大学理论物理专业分别获得学士、硕士、博士学位，期间先后师从赵书城教授和段一士教授攻读研究生。2004年作为兰州大学“萃英人才建设计划”引进人员留兰大工作，并继承赵书城教授主持国家自然科学基金项目。在宇宙弦、暗能量、黑洞、 p -膜拓扑规范场论、 Φ -映射拓扑流理论应用等科研领域发表SCI论文50余篇。主讲研究生和本科生《量子场论》、物理隆基班《微分几何与拓扑》、材料物理专业《量子力学》等课程。作为会议秘书，成功主办2006年北京弦理论大会兰州分会、2007年兰州大学理论物理前沿研讨会、2008年中国引力与相对论天体物理学会年会。荣获兰州大学2007年度优秀班主任。2010年10月至2011年10月在美国哈佛大学物理系访问。2011年11月至2012年10月在哈佛大学数学系进行博士后工作。

研究方向：

1. 广义相对论
2. 拓扑规范场论

研究工作：

广义相对论、拓扑规范场论

1. Ran Li, Ji-Rong Ren, Quasinormal Modes of Self-Dual Warped AdS₃ Black Hole in Topological Massive Gravity, Phys. Rev. D 83 (2011) 064024
2. Ran Li and Ji-Rong Ren, Holographic Dual of Linear Dilaton Black Hole in Einstein-Maxwell-Dilaton-Axion Gravity, JHEP, 1009:039, 2010
3. Tao Zhu, Ji-Rong Ren and Ming-Fan Li, Corrected entropy of Friedmann-Robertson-Walker universe in tunneling method, JCAP08(2009)010
4. Tao Zhu, Ji-Rong Ren, Ming-Fan Li, Influence of generalized and extended uncertainty principle on thermodynamics of FRW universe, Physics Letters B, Volume 674, Issue 3, 20 April 2009, Pages 204-209
5. Ran Li, Ji-Rong Ren (Corresponding author), Dun-Fu Shi, Fermions tunneling from apparent horizon of FRW universe, Physics Letters B, 670(2009)446---448
6. Ran Li, Ji-Rong Ren, Dirac Particles tunneling from BTZ Black hole, Physics Letters B, 661(2008) 370-372, arXiv:0802.3954
7. Ji-Rong Ren, Pu-Jian Mao, Ran Li and Lin-Yu Jia, Hawking radiation of the Godel black hole, Class. Quantum Grav. 27(2010)165016
8. Ran Li, Ming-Fan Li, Ji-Rong Ren, Entropy of Kaluza-Klein Black Hole from Kerr/CFT Correspondence, Phys. Lett. B 691(2010)249-253
9. Ran Li, Ji-Rong Ren (Corresponding author), Shao-Wen Wei, Hawking radiation of Dirac particles from the Kerr black hole, Class. Quantum Grav. 25 (2008) 125016 (5pp), doi: 10.1088/0264-9381/25/12/125016, Highlights of 2008 and 2009 in Class. Quantum Grav.
10. Ran Li, Shi Li and Ji-Rong Ren, Hawking radiation of the fermionic field and anomaly in (2+1)-dimensional black holes, Class. Quantum Grav. 27(2010)155011
11. Ran Li, Ming-Fan Li, Ji-Rong Ren, Hidden Conformal Symmetry of Self-Dual Warped AdS₃ Black Holes in Topological Massive Gravity, Eur. Phys. J. C 71(2011)1566
12. Ran Li, Ji-Rong Ren, and Shao-Wen Wei, Gravitational anomaly and Hawking radiation of apparent horizon in FRW universe, Eur. Phys. J. C, 62 (2009) 455--C458
13. Pu-Jian Mao, Ran Li, Lin-Yu Jia and Ji-Rong Ren, Hawking radiation of Dirac particles from the Myers-Perry

14. Tao Zhu, Ji-Rong Ren, Corrections to Hawking-like Radiation for a Friedmann-Robertson-Walker Universe, *Euro. Phys. J. C* 62 (2009) 413, arXiv:0807.3787, hep-th, arXiv:0811.4074
15. Ji-Rong Ren, Shu-Jun Rong, and Tao Zhu, A Novel Approach to Topological Defects in Vector Order Parameter System, *Chin. Phys. B* 18 (2009) 2901-2904
16. Ren Ji-Rong, Mo Shu-Fan, and Zhu Tao, Knot solitons in the AFZ model, *Chinese Physics B*, 1674-1056/2009/18(05)/1-07, Vol 18 No 5, May 2009
17. Ren Ji-Rong, Li Hai-Tao, Li Ran and Wang Ji-Biao, Monopole excitations in Chern-Simons-type Lorentz-violating $SO(3)$ model, *Chinese Physics B*, 1674-1056, 2009, 18(11), 1-07.
18. Ren Ji-Rong and Guo Heng-T-Topological aspects in a two-component Bose condensed system in a neutron star, *Chinese Phys. B* (2009) 18 3379-3383
19. Ji-Rong Ren, Ran Li, Yi-Shi Duan, Inner topological structure of Hopf invariant, *J. Math. Phys.*, 48(2007) 073502
20. JI-RONG REN, LIN-YU JIA, PU-JIAN MAO, ENTROPY QUANTIZATION OF D-DIMENSIONAL GAUSS-CBONNET BLACK HOLES, ENTROPY QUANTIZATION OF D-DIMENSIONAL GAUSS-CBONNET BLACK HOLES, *Modern Physics Letters A (MPLA)*, Volume: 25, Issue: 30(2010) pp. 2599-2609
21. Ren J. R., Mao P. J., Li R., et al., HAWKING BLACK BODY SPECTRUM OF G DEL BLACK HOLE FROM TUNNELING MECHANISM , *MODERN PHYSICS LETTERS A* Volume: 25 Issue: 25 Pages: 2167-2181 Published: AUG 20 2010
22. Tao Zhu, Ji-Rong Ren, and Douglas Singleton, Hawking-like radiation as tunneling from the apparent horizon in a FRW Universe, *Int. J. Mod. Phys. D*, 19 (2010) 159-169
23. Tao Zhu, Ji-Rong Ren, and Shu-Fan Mo, Thermodynamics of Friedmann Equation and Masslike Function in General Braneworld, *Int. J. Mod. Phys. A* 24(2009)5877-5888
24. Ren Ji-Rong , SONG Shi-Xiong, and WEI Shao-Wen, Area Spectrum of D-Dimensional Large Schwarzschild-AdS Black Hole from Asymptotic Quasinormal Modes, *Commun. Theor. Phys.* 53 (2010) pp. 1097-C1099
25. Ren Ji-Rong , XU Dong-Hui, ZHANG Xin-Hui, and LI Ran, Topological aspect of triplet Superconductor, *Commun. Theor. Phys.*, 47 (2007)944-948
26. Shu-Fan Mo, Ren Ji-Rong , Tao Zhu, The bifurcation theory of magnetic monopoles in a charged two-condensate Bose-Einstein system, *J. Phys. A: Math. Theor.*, 41 (2008) 315214 (16pp)
27. Shi-Xiong Song, Ji-Rong Ren , Entropy of Sonic Black Hole in the Brick Wall Approach, *International Journal of Theoretical Physics*, DOI 10.1007/s10773-010-0386-2
28. Ren JR, Song SX, Quantum Entanglement Under Lorentz Transformation, *INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS* Volume: 49 Issue: 6 Pages: 1317-1323 Published: JUN 2010
29. MO Shu-Fan, REN Ji-Rong, and ZHU Tao, Branch Processes of Regular Magnetic Monopole, *Commun. Theor. Phys.* , 51 (2009) pp. 293-C298
30. Yi-Shi Duan, Ji-Rong Ren, Ran Li, Vector and Spinor Decomposition of $SU(2)$ Gauge Potential, their equivalence and Knot Structure in $SU(2)$ Chern-Simons Theory, *Commun. Theor. Phys.*, 47 (2007) 875
31. Ji-Rong Ren, Ran Li, Yi-shi Duan, Decomposition of $SU(2)$ Connection and Knot Structure in Skyrme-Faddeev Model, *Int. J. Mod. Phys. A*, 23(2008) 1447-1456
32. Ji-Rong Ren, Ran Li, Unified First Law and Thermodynamics of Dynamical Black Hole in n-dimensional Vaidya Spacetime, *Mod. Phys. Lett. A*, A23:3265-3270, 2008
33. Ji-Rong Ren, Ran Li, Fei-Hu Liu, Hawking Temperature of Dilaton Black Holes from Tunneling, *Mod. Phys. Lett. A*, *Mod. Phys. Lett. A*, 23(2009)3419-3429
34. JI-BIAO WANG and JI-RONG REN, SKYRMION EXCITATIONS OF SPIN HALL EFFECT IN ATOMS, *Modern Physics Letters B*, Vol. 23, No. 16 (2009) 1975-1982
35. REN Ji-Rong, GUO Heng, ZHANG Xin-Hui, LI Ran, Topological Aspects in an Interacting Mixture of a Charged and a Neutral Superfluid in Neutron Stars, *CHIN. PHYS. LETT.* Vol. 26, No. 7 (2009) 079701
36. Ji-Rong Ren, Tao Zhu and Yi-Shi Duan, Topological Properties of Spatial Coherence Function, *Chin. Phys. Lett.*, 25(2008)367-370
37. Ji-Rong Ren, Tao Zhu and Yi-Shi Duan, Topological Aspect of Knotted Vortex Filaments in Excitable Media, *Chin. Phys. Lett.*, 25(2008)353-356
38. Zhu Tao, Ren Ji-Rong, Mo, Shu-Fan, Branch Processes of Vortex Filaments and Hopf Invariant Constraint on Scroll Wave, *Commun. Theor. Phys* 52 (2009) 1149-C1156, Vol. 52, No. 6, December 15, 2009, arXiv:0807.3787
39. Ji-Rong Ren, Tao Zhu, Shu-Fan Mo, Evolution of the Spiral Waves in Excitable System, *Commun. Theor. Phys.* , 51 (2009) pp. 621-C626, arXiv:0811.0217
40. REN Ji-Rong, GUO Heng, ZHANG Xin-Hui, and LI Ran, Knotted Solitons in an Interacting Mixture of a Charged and a Neutral Superfluid for Neutron Stars, *Commun. Theor. Phys.* , 52 (2009) pp. 555-C560
41. Ji-Rong Ren, Tao Zhu and Yi-Shi Duan, Topological of knotted optical vortices, *Commun. Theor. Phys.*, 50 (2008)345-348

发表论文:

42. Ji-Rong Ren, Tao Zhu and Shu-Fan Mo, Knotted Topological Phase Singularities of Electromagnetic Field , Commun. Theor. Phys., 50(2008)1071-1076
43. Ji-Rong Ren, WEI Shao-Wen, XU Dong-Hui, and DUAN Yi-Shi, Topological vortices in a spin-triplet superconductor , Commun. Theor. Phys., 50(2008)525-528
44. Ji-Rong Ren, WANG Ji-Biao, LI Ran, XU Dong-Hui, and DUAN Yi-Shi, Topological Aspects of Solitons in Ferromagnets , Commun. Theor. Phys., 50(2008)777-780
45. Ji-Rong Ren, Ran Li, Yi-shi Duan, A New Route to the Interpretation of Hopf Invariant, Commun. Theor. Phys., 50(2008)53-58
46. Ren Ji-Rong , XU Dong-Hui, ZHANG Xin-Hui, and DUAN Yi-Shi, Topological aspects of superconductors at the dual point, Commun. Theor. Phys., 49(2008)1627-1630
47. WANG Ji-Biao, REN Ji-Rong, and LI Ran, Skyrmion Excitations in Planar Ferromagnets, Commun. Theor. Phys. , 51 (2009) pp. 157 `` C160
48. WANG Ji-Biao, REN Ji-Rong, and LI Ran, Vortex Lines and Monopoles in Electrically Conducting Plasmas, Commun. Theor. Phys. 51 (2009) pp. 335 `` C340
49. Shu-Fan Mo , Ji-Rong Ren , Li Zhao and Tao Zhu, The Branch Processes of Chern-Simons (CS) p -Branes, International Journal of Theoretical Physics, 48 (2009) 645-657
50. Yi-Shi Duan, Ji-rong Ren, The Non-Abelian Topological Gauge Field Theory of p-Branes, hep-th/0504114
51. Duan Yi-Shi, Ren Ji-Rong, Yang Jie, Cosmic strings and quintessence, Chin. Phys. Lett. Vol. 20, No.12 (2003) 2133, hep-th/0303021
52. Yu-Xiao Liu, Li-Jie Zhang, Ji-Rong Ren , Ghost field realizations of the spinor $W_{2,s}$ strings based on the linear $W(1,2,s)$ algebras, JHEP 0501 (2005) 005 , hep-th/0507234
53. Li-Jie Zhang, Yu-Xiao Liu, Ji-Rong Ren, New Spinor Field Realizations of the Non-Critical $W_{2,s}$ Strings , Chin. Phys. Lett. Vol. 20, No.12 (2003) 2133, hep-th/0507265

研究成果： 同上

宋士雄 2008硕
李 适 2008硕

研究组成员： 贾林玉 2009硕
毛普健 2009硕

陈 强 2010硕

登陆修改