

贾俊基简历

个人信息

姓名：贾俊基

职位：副教授，博士生导师

单位：武汉大学物理科学与技术学院

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学历

学位：

博士(理论物理)：2009年9月，西安大略大学，加拿大伦敦
导师：V. A. Miransky

博士论文：Nonperturbative Dynamics in Gauge Field Theories
at Finite Density and Beyond

硕士(理论物理)：2005年9月，西安大略大学，加拿大伦敦
导师：V. A. Miransky

硕士论文：Application of Boundary Feedback Control Method
to Some Physical Problems

理学学士(材料物理)：2003年7月，吉林大学，中国长春

获奖情况：

湖北省“楚天学者”计划-楚天学子(2013)

日本学术振兴会外国人特别研究员奖金(2011-2013)

中国国家优秀自费留学生奖学金(2008)

加拿大安大略省研究生奖学金(2007-2009)

加拿大西安大略大学Lumsden研究生科学奖(2007年4月)

新加坡国家环境署研究基金(2003)

吉林大学优秀毕业生(2003)

吉林大学一等奖学金(1999-2003)

学术经历

- 2013.2-今: 副教授, 博士生导师, 武汉大学物理科学与技术学院
2011.10-2013.1: JSPS(日本学术振兴会)外国人特别研究员
日本名古屋大学小林-益川基本粒子与宇宙起源研究所
2009.9-2011.8: 博士后研究员, 加拿大西安大略大学
2004.9-2009.8: 研究助理, 加拿大西安大略大学
2004.9-2009.8: 教学助理, 加拿大西安大略大学

教学经历

教授课程

- 广义相对论引论: 2012-2013、2013-2014、2014-2015学年下学期
研究生课程; 全英文
原子物理与核物理: 2013-2014、2014-2015学年下学期
本科生课程; 全英文

助教经历

- 微积分: 2004、2006 秋季学期, 2006、2007 冬季学期
线性代数: 2004、2007 冬季学期, 2005 秋季学期
电子工程用高等数学: 2005 冬季学期
化学工程用高等数学: 2007 秋季学期
量子场论I: 2008 秋季学期
应用线性代数: 2008 冬季学期
获最佳助教题名: 2006 冬季学期

科研情况

发表的论文: (我的全部高能物理类论文, 作者按姓氏首字母排序。)
同行评议类杂志论文:

1. Junji Jia, E. V. Gorbar, V. P. Gusynin and V.A. Miransky
Phase diagram in bilayer graphene in electric and in-plane magnetic fields,
Submitted to Phys. Rev. B. (2015).
2. Junji Jia, E. V. Gorbar and V. P. Gusynin,
Gap generation in ABC-stacked multilayer graphene: Screening versus band flattening,
Phys. Rev. B 88, 205428 (2013).
3. Junji Jia, Shinya Matsuzaki and Koichi Yamawaki,
Walking techni-pions at LHC,
Phys. Rev. D 87, 016006 (2013).

4. E.V. Gorbar, V.P. Gusynin, Junji Jia and V.A. Miransky,
Broken-symmetry states and phase diagram of the lowest Landau level in bilayer graphene,
Phys. Rev. B 84, 235449 (2011).
5. F.A. Chishtie, T. Hanif, Junji Jia, R.B. Mann, D.G.C. McKeon, T.N. Sherry and T.G. Steele,
Can the renormalization group improved effective potential be used to estimate the Higgs mass in the conformal limit of the standard model?
Phys. Rev. D 83, 105009 (2011).
6. F. A. Chishtie, T. Hanif, Junji Jia and D. G. C. McKeon,
Summing radiative corrections to the effective potential,
Int. J. Mod. Phys. A. 25, 5711–5729 (2010).
7. Junji Jia,
New spherically symmetric solutions in Einstein-Yang-Mills-Higgs model,
Canadian J. Phys. 88, 189 (2010).
8. A. Buchel, F. A. Chishtie, T. Hanif, S. Homayouni, Junji Jia and D. G. C. McKeon,
Radiative corrections in vector-tensor models,
Int. J. Mod. Phys. A. 25, 163 (2010).
9. Junji Jia and Hongbao Zhang,
Can the Copernican principle be tested using the cosmic neutrino background?,
J. Cosmol. Astropart. Phys. 0812, 002 (2008).
10. F. A. Chishtie, Junji Jia and D. G. C. McKeon,
The derivative expansion of the effective action and the renormalization group equation,
Phys. Rev. D 76, 105006 (2007).
11. A. Buchel, Junji Jia and V. A. Miransky,
Dynamical stabilization of runaway potentials and landscape of vacua at finite density,
Nucl. Phys. B 772, 323 (2007).
12. A. Buchel, Junji Jia and V. A. Miransky,
Dynamical stabilization of runaway potentials at finite density,
Phys. Lett. B 647, 305 (2007).
13. M. Hashimoto and Junji Jia,
Meissner screening masses in gluonic phase,

Phys. Rev. D 76, 114019 (2007).

14. Nan Yang, Haibin Yang, Junji Jia and Xiaofen Pang,
Formation and magnetic properties of nanosized PbFe₁₂O₁₉ particles synthesized by citrate precursor technique,
J. Alloys & Compounds 438, 263 (2007).
15. E. V. Gorbar, Junji Jia and V. A. Miransky,
Vortices in gauge models at finite density with vector condensates,
Phys. Rev. D 73, 045001 (2006).
16. Cher Ming Tan, Junji Jia and Weibo Yu,
Temperature dependence of the field emission of multiwalled carbon nanotubes,
Appl. Phys. Lett. 86, 263104 (2005).

会议论文:

17. Junji Jia and Shinya Matsuzaki,
One-family walking techni-pions,
Strong Coupling Gauge Theories in the LHC Perspective (SCGT12), World Scientific,
2014, ISBN: 978-981-4566-24-7, pp. 415-418.
18. E.V. Gorbar, V.P. Gusynin, Junji Jia and V.A. Miransky,
Phase diagram of the lowest Landau level in bilayer graphene,
Progress of Theoretical Physics Supplement 197, 107 (2012).
19. Cher Ming Tan, Junji Jia, Ang L.K., Kuan Tat Ng and Yong Chern Foo,
Effect of high voltage annealing on the field emission of multiwalled carbon nanotube film,
5th IEEE Conf. on Nanotechnology, 2, 638 (2005).

参加及组织的会议及所作报告 (本人是会议1, 8和14的组织者):

1. Special International Workshop on Theories of Topological States in Condensed Matter Systems,
November 28, 2014, Wuhan Univeristy, Wuhan, China
报告: Nonperturbative gaps of multilayer graphene
2. The 11th ICFA Seminar on Future Perspectives in High-Energy Physics
October 27-30, 2014, IHEP, CAS, Beijing, China
3. The 4th ICQs Joint Workshop on Spintronics
Jun 2-3, 2014, Peking University, Beijing, China

4. 2014中国物理学会高能物理分会
Apr 18-23, 2014, Central Chinese Normal University, Wuhan, Hubei, China
5. 基于加速器的高能物理发展战略研讨会
Mar 20-21, 2014, Institute of High Energy Physics, Beijing, China
6. 2013年湖北物理学会年会
Aug 21-24, 2013, Hubei Nationality University, Enshi, Hubei, China
7. 2013年牡丹江合作组会议
Aug 17-20, 2013, Wuhan, Hubei, China
8. Workshop on Strong Coupling Gauge Theories in the LHC Perspective,
December 4-7, 2012, Nagoya University, Japan
海报: One-family walking techni-pions
9. The 12th International Workshop on Tau Lepton Physics,
September 17-21, 2012, Nagoya University, Japan
10. Working Month on Physics Frontiers in China,
August 25, 2012, Peking University, China
报告: Techni-Pions at the LHC
11. 20th International Conference on SUSY and Unification of Fundamental Interactions,
August 13-18, 2012, Peking University, China
12. June 11, 2012, Wuhan University, Wuhan, China
报告: Quantum Hall effect in bilayer graphene
13. June 8, 2012, Central China Normal University, Wuhan, China
报告: Technicolor and Walking Techni-Pions at the LHC
14. KMI Mini-Workshop on "Conformality in Strong Coupling Gauge Theories at LHC and Lattice" (SCGT12Mini),
March 18-20, 2012, Kobayashi-Maskawa Institute, Nagoya University, Japan
15. Nagoya University GCOE Winter School/Workshop 2011 - Particle Cosmology,
December 16-18, 2011, Kobayashi-Maskawa Institute, Nagoya University, Japan
16. KMI Theory Seminar,
November 9, 2011, Kobayashi-Maskawa Institute, Nagoya University, Japan
报告: Quantum Halls states in bilayer graphene,
17. Shoichi Sakata Centennial Symposium (SAKATA100),

- October 27-28, 2011, Kobayashi-Maskawa Institute, Nagoya University, Japan
18. KMI Inauguration Conference on -Quest for the Origin of Particles and the Universe (KMIIN),
October 24-26, 2011, Kobayashi-Maskawa Institute, Nagoya University, Japan
 19. International Conference on Frontier Topics in Nanostructures and Condensed Matter Theory (NCMT-2011),
March 9-11, 2011, University of Western Ontario, London, Canada
 20. CAIMS (Canadian Applied and Industrial Math. Soc.) 2009,
June 10-14, 2009, University of Western Ontario, London, Canada
报告: Can the Copernican principle be tested by cosmic neutrino background?
 21. The Eighth Canadian Summer School on Quantum Information,
June 9-13, 2008, Universite de Montreal, Canada.
 22. Summer School on Particle Physics, Cosmology and Strings,
August 6-18, 2007, Perimeter Institute, Waterloo, Canada.
 23. Workshop in memory of Victor Elias,
May 28-30, 2007, University of Western Ontario, London, Canada.
报告: Derivative Expansion of the Effective Action and the Renormalization Group Equation-Kinetic Term.
 24. Exotic States of Hot and Dense Matter and their Dual Description,
May 22-25, 2007, Perimeter Institute, Waterloo, Canada.

主持及参与的科研项目：

1. 主持湖北省自然科学基金面上项目，“非微扰方法在二维凝聚态体系上的应用”，2015-2016
2. 承担国家科技部ITER计划专项，“面向燃烧等离子体的诊断研究—快离子损失诊断平台”（金刚石探测器部分），2014-2018
3. 主持国家教育部博士点基金新教师类，“外场及内部因素对多层石墨烯能带结构的影响的研究”，2014-2016
4. 主持日本学术振兴会JSPS外国人特别研究员研究资助项目，“质量的电弱对称性破缺成因”，2011-2013

5. 参与加拿大国家科学与工程基金委 (NSERC) 发现基金 (Discovery Grant) 项目, “Nonperturbative dynamics in the standard model and beyond”, 2010-2011, 第二参与者
6. 参与加拿大国家科学与工程基金委 (NSERC) 发现基金 (Discovery Grant) 项目, “Nonperturbative dynamics in the standard model and beyond”, 2005-2010, 第二参与者
7. 参与加拿大国家科学与工程基金委 (NSERC) 发现基金 (Discovery Grant) 项目, “Dynamical electroweak symmetry breaking in the standard model and beyond”, 2004-2005, 第二参与者