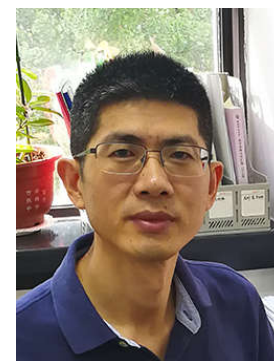


[电子邮件](#) | [办公系统](#) | [服务门户](#) [首页](#) [院系介绍](#) [师资队伍](#) [科学研究](#) [本科生教育](#) [研究生培养](#) [学生工作](#) [党建工作](#) [人才招聘](#) [English](#) [下载专区](#)当前位置: [首页](#)» [师资队伍](#)» [全体教师](#)» [教学科研](#)

## 纪安春

教授

所属学科	理论物理
研究方向	冷原子物理, 腔量子电动力学, 强关联物理
招生方向	理论物理、凝聚态物理
联系方式	anchun.ji@cnu.edu.cn



### 个人简介

纪安春, 首都师范大学物理系教授, 博士生导师。2006年北京大学获得博士学位, 博士期间一直从事低维强关联体系的研究。2007年1月进入中科院物理所博士后流动站, 开始从事冷原子和腔量子电动力学方面的研究。2008年11月来首师大物理系工作, 被聘为首都师范大学破格教授, 2012年入选教育部新世纪优秀人才, 2013年入选北京市青年拔尖人才培育计划。主持国家自然科学基金面上项目2目、参加973计划等课题, 并作为北京市理论物理创新团队核心成员。获2016年北京市科学技术奖一等奖(第三完成人)。

发表SCI文章30多篇, 其中以第一作者或者通讯作者发表Phys. Rev. Lett.论文4篇, 以及Phys. Rev. A/B、Phys. Rev. Applied、New J. Phys.20余篇。研究成果多次被Reviews of Modern Physics, Physics Reports, Nature, Phys. Rev. Lett. 等期刊评述和引用。

获2014年首都师范大学十佳教师, 2016年首都师范大学优秀主讲教师。

### 招生计划

拟招收硕士研究生1-2人, 博士研究生1-2人。

### 研究方向

主要研究方向包括冷原子物理、腔量子电动力学以及凝聚态物理等。冷原子物理方面主要研究玻色爱因斯坦凝聚体、超流费米气体等新奇的多体物质相(态)和相变等。腔量子电动力学方面主要关注冷原子与腔耦合之后的非平衡动力学行为。在凝聚态物理方面主要关注(高温)超导电性和超流体的奇特性质, 以及强关联电子体系的新奇物性。

## 科研成果

\*号为通讯作者

- 1, Pei-Song He, Qing Sun, and An-Chun Ji, Oscillating Casimir potential between two impurities in a spin-orbit-coupled Bose-Einstein condensate, Phys. Rev. A 96, 043617 (2017).
- 2, P. Zuo, Y. Jiang, Z. G. Ma, L. Wang, B. Zhao, Y. F. Li, G. Yue, H. Y. Wu, H. J. Yan, H. Q. Jia, W. X. Wang, J. M. Zhou, Q. Sun, W. M. Liu, **An-Chun Ji\***, and H. Chen, p-n Junction Rectifying Characteristics of Purely n-Type GaN-Based Structures, Phys. Rev. Applied 8, 024005 (2017).
- 3, Biao Dong, Qing Sun, Wu-Ming Liu, **An-Chun Ji**, Xiao-Fei Zhang, and Shou-Gang Zhang, Multiply quantized and fractional skyrmions in a binary dipolar Bose-Einstein condensate under rotation, Phys. Rev. A 96, 013619 (2017).
- 4, Liang-Liang Wang, Qing Sun, W.-M. Liu, G. Juzeliunas, and **An-Chun Ji\***, Fulde-Ferrell-Larkin-Ovchinnikov state to topological superfluidity transition in bilayer spin-orbit-coupled degenerate Fermi gases, Phys. Rev. A 95, 053628 (2017).
- 5, Qing Sun, Jie Hu, Lin Wen, W.-M. Liu, G. Juzeliūnas and **An-Chun Ji\***, Ground states of a Bose-Einstein Condensate in a one-dimensional laser-assisted optical lattice, Scientific Reports, 6, 37679 (2016).
- 6, Lin Wen, Q. Sun, Yu Chen, Deng-Shan Wang, J. Hu, H. Chen, W.-M. Liu, G. Juzeliunas, Boris A. Malomed, and **An-Chun Ji\***, Motion of solitons in one-dimensional spin-orbit-coupled Bose-Einstein condensates, Phys. Rev. A 94, 061602(R) (2016).
- 7, S.-W. Su, S.-C. Gou, Q. Sun, L. Wen, W.-M. Liu, **A.-C. Ji\***, J. Ruseckas, and G. Juzeliunas, Rashba-type spin-orbit coupling in bilayer Bose-Einstein condensates, Phys. Rev. A 93, 053630 (2016).
- 8, Xin Zhang, Wei Wu, Gang Li, Lin Wen, Qing Sun and **An-Chun Ji\***, Phase diagram of interacting Fermi gas in spin-orbit coupled square lattices, New J. Phys. 17, 073036 (2015).
- 9, Qing Sun, Lin Wen, W.-M. Liu, G. Juzeliunas, and **An-Chun Ji\***, Tunneling-assisted spin-orbit coupling in bilayer Bose-Einstein condensates, Phys. Rev. A 91, 033619 (2015).
- 10, Liang He, **Anchun Ji** and Walter Hofstetter, Bose-Bose mixtures with synthetic spin-orbit coupling in optical lattices, Phys. Rev. A 92, 023630 (2015).
- 11, R.-Y. Yuan, G.-B. Zhu, X. Zhao, Y. Guo, H. Yan, Q. Sun, and **A.-C. Ji\***, Coulomb Interaction Effects on the Terahertz Photon-Assisted Tunneling through a InAs Quantum Dot, Phys. Rev. B 89, 195301 (2014).
- 12, Jian-Hua Wu, Ran Qi, **An-Chun Ji**, Wu-Ming Liu, Quantum tunneling of ultracold atoms in optical traps, Frontiers of Physics 9, 137 (2014).
- 13, X.-F. Zhang, Q. Sun, Yu-Chuan Wen, W-M. Liu, S. Eggert, and **An-Chun Ji\***, Rydberg Polaritons in a Cavity: A Superradiant Solid, Phys. Rev. Lett. 110, 090402 (2013).
- 14, G.-B. Zhu, Q. Sun, Y.-Y. Zhang, K. S. Chan, W.-M. Liu, and **A.-C. Ji\***, Spin-based effects and transport properties of a spin-orbit-coupled hexagonal optical lattice, Phys. Rev. A 88, 023608 (2013).
- 15, Q. Sun, G.-B. Zhu, W.-M. Liu, and **A.-C. Ji\***, Spin-orbit coupling effects on the superfluidity of a Fermi gas in an optical lattice, Phys. Rev. A 88, 063637 (2013).
- 16, Q. Sun, W.-M. Liu, and **An-Chun Ji\***, Optomechanics with interacting Fermi gases: a new approach to detecting spin-charge separation in one-dimensional ultracold atom systems, New Journal of Physics 15, 013013 (2013).
- 17, L. Wen, Q. Sun\*, H. Q. Wang, **A. C. Ji\***, and W. M. Liu, Ground state of spin-1 Bose-Einstein condensates with spin-orbit coupling in a Zeeman field, Phys. Rev. A 86, 043602 (2012).
- 18, **A.-C. Ji\***, Q. Sun, X.H. Hu, W.-M. Liu, and X.C. Xie, Quantum phase transitions and coherent tunneling in a bilayer of ultracold atoms with dipole interactions, Eur. Phys. J. B 85, 194 (2012).

19, Q. Sun, Xing-Hua Hu, **An-Chun Ji\***, and W.-M. Liu, Dynamics of a degenerate Fermi gas in a one-dimensional optical lattice coupled to a cavity, Phys. Rev. A 83, 043606 (2011).

20, Q. Sun, Xing-Hua Hu, W. M. Liu, X. C. Xie, and **An-Chun Ji\***, Effect on cavity optomechanics of the interaction between a cavity field and a one-dimensional interacting bosonic gas, Phys. Rev. A 84, 023822 (2011).

21, **An-Chun Ji\***, X. C. Xie and W. M. Liu, The Josephson Effects of Photons in Two Weakly-linked Microcavities, Phys. Rev. Lett. 102, 023602 (2009).

22, **An-Chun Ji\***, W. M. Liu, Jun Liang Song, and Fei Zhou, Dynamical Creation of Fractionalized Vortices and Vortex Lattices, Phys. Rev. Lett. 101, 010402 (2008).

23, **An-Chun Ji\***, X. C. Xie and W. M. Liu, Quantum Magnetic Dynamics of Polarized Light in Arrays of Microcavities, Phys. Rev. Lett. 99, 183602 (2007).

分享到:

版权所有 © 首都师范大学物理系 | 地址: 西三环北路105号 | 邮编: 100048 | 联系电话:010-68902348