

Vita of Fu-Chun Zhang

— Updated on Mar 10, 2011

Fu-Chun Zhang	Department of Physics
Born: April 23, 1946	University of Hong Kong
Birthplace: Zhejiang, China	Hong Kong
Citizenship: USA	Phone: (852) 2241 5932
Marital Status: Married	
e-mail: fuchun@hku.hk	

Education

1983 Ph.D. in Physics, Virginia Polytechnique Institute and State University, USA
1978-1980 Graduate School of Univ. of Sci. and Technol. China, and IOP, CAS
1963-1968 Undergraduate study, Dept of Phys II, Fudan Univ., China

Major Honors and Scholarship

2007 - Member of Editorial Board, Phys. Rev. Lett.
2005 Distinguished Research Achievement Award of the University of Hong Kong
2002 University Distinguished Research Professor, University of Cincinnati
 (the 17th recipient in Univ. of Cincinnati)
1999 Fellow of American Physical Society

Other Honors, Titles, Awards, and Editorship

2007 -10 Divisional Associate Editor, Physical Review Letters
2007 -10 Co-Editor, Europhysics Letters
2005- Associate Editor, Journal of Modern Physics, Singapore
2005 Fellow, The Institute of Physics, UK
2003- Guang-Biao Chair Professorship (honorary), Zhejiang University, China
2002 National Award in Natural Sciences, 2nd Class, China
 shared with Y. Q. Li, D. N. Shi, M. Ma, and S. J. Gu
2000 -04 Overseas Assessor, Chinese Academy of Sciences
2000 - Advisory Professor, Fudan University, Shanghai, China
1997 Faculty Achievement Award, Univ. of Cincinnati
1983 Summer Cunningham Fellowship award for graduate student
 at Virginia Polytechnique Institute and State University

Scholarship and Academic Activities

2010 -	Member, Advisory Committee, Nat Key Lab. on Superconductivity, Beijing, China
Dec. 2009	Member, Science Assessment Committee, Center of Theoretical Science, Taiwan
June 09	Elected Chair, Gordon Research Conference, Superconductivity, Hong Kong (HK)
2009-	Member, Science Council, Center for Quantum Manipulation and Control, Fudan Univ., China
June 22-24, 09	Chair, Workshop on "Novel Topological States in Condensed Matter Physics", HK
Dec. 08	Chair, Hong Kong Forum 2008, Quantum Matter and Simulations, HK
Dec. 08	Member, Science Assessment Committee, Phys. Dept., Shanghai Jiao Tong Univ., China
Mar. 08 -	Co-convenor, with Wengcho Chew, Strategic Research Theme "Computational Sciences and Engineering", Univ. of Hong Kong (HKU)
2008 -	Member, Science Council, Asia Pacific Center for Theoretical Physics, Korea
2008 -	Member, Advisory Committee, Faculty of Science, Baptist Univ. of Hong Kong
2008 -	Member, Advisory Committee, College of Science, Nat. Jiao Tong Univ., Taiwan
Dec. 07	Chair, Hong Kong Forum of Physics - Frontier in Condensed Matter, HK
Nov. 07 -	Honorary Chair, Dept. of Phys., Zhejiang Univ., China
Oct. 07	Vice Chair, Gordon Research Conference in Superconductivity, Switzerland
Summer 07	Co-organizer, 1st program at Kevli Inst. of Theor. Phys. China, Beijing
June 07 -	Member, Physical Science Panel, Research Grant Council (RGC), HK
June 07 -	Panel member, Joint proposal for NSF-China/ HK RGC
05- 07	Convenor, University's Strategic Theme "Computational Physics and Numerical Methods", HKU
Apr 2007	Member, Science Assessment Committee, Nat. Tsinghua Univ., Taiwan
Dec. 06	Co-organizer, Hong Kong Forum of Condensed Matter Physics Past, Present, and Future, HK
May 06	Member, International Organizing Committee, Spintronics Workshop, Singapore
Aug. 05	Director, Croucher Advanced Institute Study: Science and Application of Spintronics, HK
June 04	Co-Chair, 2nd Asia Pacific Workshop "Frontiers in Condensed Matter Physics", HK

External Grants since 1998

- 1998-2001 The US Department of Energy award, shared with X. C. Xie, USD 150K
1998-2000 The US Petroleum Research Fund award, with M. Jarrell, USD 60K
2001-2004 The US Department of Energy award, shared with X. C. Xie, USD 150K
2001-2004 Outstanding Overseas Chinese award,
Chinese Academy of Sciences, RMB 500K
2001-2004 The US National Science Foundation grant, shared with M. Jarrell, USD 450K
2004-2007 PI, RGC (Research Grant Council) individual CERG grant, HK, HKD 392K
2005-2008 PI, RGC CERG grant, HK, HKD 463.6K
2006-2009 PI, RGC Central Allocation Grant, HK
"Exploring Novel Quantum Matter in Condensed Matter Physics", HKD 2.4M
with H. Q. Lin at CUHK, T. K. Ng at HKUST,
L. H. Tang at BUHK, and Z. D. Wang at HKU
2006-2008 PI, RGC CERG grant, HKD 388K, HK
2007-2010 PI, RGC CERG grant, HKD 550K, HK
2008-2011 PI, RGC GRF (changed name of CERG) grant, HKD 783K, HK
2009-2012 PI, RGC Collaborative Research Grant,
"Semiconductor Spntronic", HK, HKD 4.5M
with S. Q. Shen, X. D. Cui, M. H. Xie, W. K. Wong at HKU,
J. N. Wang, X. R. Wang at HKUST, R. B. Liu, Q. Li at CUHK
2009-2011 PI, RGC GRF grant, HKD 486K
2010-2017 Principal Coordinator, HK UGC Area of Excellence grant
"Theory, Modeling, and Simulation of Emerging Electronics", HKD 78M
with PIs Guanhua Chen, Wengcho Chew, Jian Wang at HKU
Philip Chan at HKUST, and Hong Guo at MiGill
2010-2013 PI, RGC GRF grant, HKD 655K

Internal Grants in HKU

- 2005-2007 PI, University Development Fund (UDF) for establishment of
"Centre of Theoretical and Computational Physics", HKD 3.5M
2005 -2008 University Distinguished Research Achievement Award of HKU, HKD 3M
2006-2009 PI, UDF for spintronics center, HKD 3.3M
2009-2012 PI, UDF for synthetic biology, HKD 3M
2009-2012 Co-convenor, UDF, with Wengcho Chew
Computational Science and Engineering, HKD 10M
2009 -2010 PI, UDF for Optics Lab. HKD 5.7M

Experience

Sep 05 - present	Director, Center of Theoretical and Computational Physics	The Univ. of Hong Kong (HKU)
Jul 05 - present	Head, Department of Physics	HKU
Aug 03 - present	Professor, Chair of Physics	HKU
Aug 06 - Jul 08	Associate Dean, Graduate School	HKU
Aug 06 - Jul 08	Board Member, Graduate Policy,	HKU
Aug 06 -Jul 08	Chair, Board of Graduate Study,	HKU
Aug 06 -Jul 08	Member, Board of Graduate Exam.,	HKU
May 02 - Aug 06	University Distinguished Research Professor	Univ. of Cincinnati, USA
Sep 88- Aug 06	Assist., Associate, Full Professor	Dept of Phys Univ. of Cincinnati, USA
Sep 86- Aug 88	Research Associate	Theoretische Physik, ETH Zuerich, Switzerland
Sep 84- Aug 86	Research Associate	Department of Physics Univ. of Maryland, USA
Sep 83- Aug 84	Postdoctoral Fellow	Department of Physics Univ. of Minnesota, USA
Sep 80- Aug 83	Teaching Assistant	Department of Physics Virginia Tech., USA
Summer 1989	Visiting Professor	Univ. of Maryland, USA
Aug 1990	Visiting Scientist	Argonne National Labs, USA
Jun-Aug 1994	Visiting Professor	Kyoto Univ., Japan
Aug - Oct 1995	Visiting Assoc. Prof.	HKUST, Hong Kong
Nov 95 - Mar 96	Visiting Professor	Nat. Tsinghua Univ., Taiwan
Apr - Jul 1996	Guest Professor	ETH-Zurich, Switzerland
Jul- Aug 1996	Visiting Scientist	ICTP, Trieste, Italy
Jan 1998	Visiting scientist	Bell Lab, Lucent Technology, USA
Jan - Feb 1999	Visiting Professor	Universite Paul Sabatier, France
Sep - Dec 2000	Visiting Professor	Chinese Univ. of Hong Kong
May 2007	Visiting Professor	Univ. of Chicago and Argonne Nat. Lab.

Research and Publications

Research fields: theoretical condensed matter physics, in particular strongly correlated electron systems including high temperature superconductivity.

— Over 150 papers published in SCI with over 6000 citations.

— Ranked as number 780 of "ISI's Most Cited Physicists, 1981 - June 1997".

— Best paper: the paper with T.M. Rice entitled "Effective Hamiltonian for superconducting Cu-oxides" published in 1988. Twice listed in "Science Watch's Top Ten for Physics", and has over 2000 citations. The minimum model (the t-J model) proposed in that paper is the most widely used and commonly accepted microscopic model in study of high temperature superconductivity. The new physics examined is a composite particle now called "Zhang-Rice singlet".

— 8 papers with each over 100 citations

— 31 papers published in the top journal of Physics, Physical Review Letters

— h-index is 40. (h-index: number of published articles with each article's citation equal to or more than h).

Full Publication List

see the link

Selected Publications

1. *Andreev and Single Particle Tunneling Spectroscopies in Underdoped Cuprates*, K. Y. Yang, K. Huang, W. Q. Chen, T. M. Rice, F. C. Zhang, Phys. Rev. Lett. 105, 167004 (2010). Times cited: 0
2. *Magnetoelectric Photocurrent Generated by Direct Interband Transitions in InGaAs/InAlAs Two-Dimensional Electron Gas*, J. F. Dai, H. Z. Lu, C. L. Yang, S. Q. Shen, F. C. Zhang, X. D. Cui, Phys. Rev. Lett. 104, 246601 (2010). Times cited: 0
3. *Anderson impurity in a helical metal*, X. Y. Feng, W. Q. Chen, J. H. Gao, Q. H. Wang, and F. C. Zhang, Phys. Rev. B 81, 235411 (2010). Times cited: 2
4. *π -junction to probe antiphase s-wave pairing in iron pnictide superconductors*, W. Q. Chen, F. J. Ma, Z. Y. Lu, F. C. Zhang, Phys. Rev. Lett. 103, 207001 (2009). Times cited: 4
5. *Strong Coupling Theory for Superconducting Iron Pnictides*, W. Q. Chen, K. Y. Yang, Y. Zhou, F. C. Zhang, Phys. Rev. Lett. 102, 047006 (2009). Times cited: 19
6. *$Na_4Ir_3O_8$ as a 3D spin liquid with fermionic spinons*, Y. Zhou, P. A. Lee, T. K. Ng, F. C. Zhang, Phys. Rev. Lett. 101, 197201 (2008). Times cited: 18
7. *Even Parity, Orbital Singlet and Spin Triplet Pairing for Superconducting $La(O_{1-x}F_x)FeAs$* , X. Dai, Z. Fang, Y. Zhou, F. C. Zhang, Phys. Rev. Lett. 101, 057008 (2008). Times cited: 40
8. *Quantum Oscillations in Magnetic Field Induced Antiferromagnetic Phase of Underdoped Cuprates : Application to Ortho-II $YBa_2Cu_3O_{6.5}$* , W. Q. Chen, K. Y. Yang, T. M. Rice, F. C. Zhang, EPL 82, 17004 (2008). Times cited: 27
9. *Phenomenological theory of the pseudogap state*, K. Y. Yang, T. M. Rice, and F. C. Zhang, Phys. Rev. B 73, 174501 (2006). Times cited: 64
10. *Particle-hole asymmetry in doped Mott insulators: implications for tunneling and photoemission spectroscopies*, M. Randeria, R. Sensarma, N. Trivedi, F. C. Zhang, Phys. Rev. Lett. 95, 137001 (2005). Times cited: 45
11. *Gossamer Superconductivity near Antiferromagnetic Mott Insulator in Layered Organic Conductors*, J. Y. Gan, Yan Chen, Z. B. Su, F. C. Zhang, Phys. Rev. Lett. 94, 067005 (2005). Times cited: 40
12. *Resonant spin Hall conductance in two-dimensional electron systems with a Rashba interaction in a perpendicular magnetic field*, S. Q. Shen, M. Ma, X. C. Xie, and F. C. Zhang, Phys. Rev. Lett. 92, 256603 (2004). Times cited: 97
13. *The physics behind high-temperature superconducting cuprates: the "plain vanilla" version of RVB*, P. W. Anderson, P. A. Lee, M. Randeria, T. M. Rice, N. Trivedi, and F. C. Zhang, J. Phys.: Condense Matter 24, Topical Review R755 (2004). Times cited : 220
14. *Gossamer superconductor, Mott insulator, and resonating valence bond state in correlated electron systems*, F. C. Zhang, Phys. Rev. Lett. 90, 207002 (2003). Times cited: 53
15. *Orbitally degenerate spin-1 model for insulating V_2O_3* , F. Mila, H. Shiina, F. C. Zhang, A. Joshi, M. Ma, and T. M. Rice, Phys. Rev. Lett. 85, 1714 (2000). Times cited: 63

16. *SU(4) theory for spin systems with orbital degeneracy*, Y. Q. Li, M. Ma, D. N. Shi, and F. C. Zhang, Phys. Rev. Lett. 81, 3527 (1998). Times cited: 134
17. *Electronic structure of lanthanum hydrides with switchable optical properties*, K. K. Ng, F. C. Zhang, V. I. Anisimov, and T. M. Rice, Phys. Rev. Lett. 78, 1311-1314 (1997). Times cited: 75
18. *Momentum-dependent charge transfer excitations in Sr₂CuO₂Cl₂-angle resolved electron energy loss spectroscopy*, Y. Y. Wang, F. C. Zhang, V. P. Dravid, K. K. Ng, M. V. Klein, S. E. Schnatterly, and L. L. Miller, Phys. Rev. Lett. 77, 1809-1812 (1996). Times cited: 46
19. *Superconductivity in quasi-one-dimensional spin liquid*, M. Sigrist, T. M. Rice, and F. C. Zhang, Phys. Rev. B 49, 12058-12061 (1994). Times cited: 161
20. *Superconducting Instability of staggered-flux phase in the t-J model*, F. C. Zhang, Phys. Rev. Lett. 64, 974-977 (1990). Times cited: 51
21. *A renormalized Hamiltonian approach to a resonant valence bond wavefunction*, F. C. Zhang, C. Gros, T. M. Rice and H. Shiba, Superconductor Science and Technology Volume 1, 36-46 (1988). Times cited: 353
22. *Effective Hamiltonian for the superconducting Cu-oxides*, F. C. Zhang and T. M. Rice, Phys. Rev. B 37, 3759-3761 (1988). Times cited: 2155
23. *Excitation gap in the fractional quantum effect: Finite layer thickness corrections*, F. C. Zhang and S. Das Sarma, Phys. Rev. B 33 (Rapid Comm.), 2903-2905 (1986). Times cited: 176
24. *Ground state of two dimensional electrons and the reversed spins in the fractional quantum Hall effect*, F. C. Zhang and T. Chakraborty, Phys. Rev. B 30 (Rapid Comm.), 7320-7322 (1984). Times cited: 77
25. *1/N expansion for the degenerate Anderson model in the mixed valence regime*, F. C. Zhang and T. K. Lee, Phys. Rev. B 28, 33-38 (1983). Times cited: 68

List of Invited Talks in International/National/Regional Workshops (since 2000)

1. *Andreev tunneling in high temperature superconducting copper oxides.*
· Beijing Forum on High Tc Superconductivity, June, 2010, Jiuzhaiguo, China
2. *Anderson impurity in topological insulator.*
· 2009 Riken workshop on Emerging Phenomena of Correlated Materials, Dec. 2-4, 2009, Wako, Japan
3. *Anderson impurity in topological insulator.*
· Hangzhou Workshop on Correlated Systems, Hangzhou, China, Oct., 2009
4. *Plenary lecture, Summary on mechanism: 9th Conference on Materials and Mechanisms of Superconductivity.*
Sept. 7-12, 2009. (largest international conference in superconductivity, held once every three years)
5. *Theory for superconductivity in iron pnictides.*
· International Symposium on Anomalous Quantum Materials 2008, Tokyo, Nov. 7-11, 2008
6. *Theory for superconductivity in iron pnictides.*
· Beijing International Workshop on Iron (Nickel) Based Superconductors, Beijing, Oct. 17-19, 2008

7. *Theory for superconductivity in iron pnictides.*
· International Conference on Superconductivity and Magnetism, Taiwan, June 2008
8. *Theory for quantum oscillation in cuprates.*
· Osaka Workshop, Dec. 2007.
9. *Exploring Exotic Superfluidity of Polarized Ultracold Fermions in Optical Lattices.*
· International workshop on low dimensional systems and quantum matters Yukawa Institute, Kyoto, Japan, Nov. 2007.
10. *Theory for quantum oscillation in cuprates.*
· Swiss Annual Physical Society Meeting, Switzerland, Oct. 2007.
11. *Theory for quantum oscillation in cuprates.*
· Magnetic Materials and Superconductivity Workshop, Sendai, Japan, August 2007.
12. *Theory for High Tc Cuprates.*
· SC3N International Conference on Superconductivity, Sydney, Jan. 2007.
13. *Theory for High Tc Cuprates.*
· 2006 Hangzhou International Workshop on Quantum Matter, Hangzhou, China, Oct. 2006.
14. *Rotational Symmetry Broken in Solium Doped High Tc Superconductor.*
· 8th International Conference on Materials and Mechanisms of Superconductivity and High Temperature Superconductors, Dresden, Germany, July 2006.
15. *A Phenomenological Theory for Pseudogap Phase of High Tc Cu-Oxides.*
· International Symposium on Anomalous Quantum Mechanics, Okinawa, Japan, June 2006.
16. *Resonant Spin Hall Conductance in 2-Dimensional Electron Gas with Rashba Coupling in a Strong Magnetic Field.*
· International Workshop on Spintronics, Singapore, May, 2006.
17. *A Phenomenological Theory for Pseudogap Phase of High Tc Cu-Oxides.*
· Invited speech at Institute of Physics Annual Workshop, Exeter, UK, April 2006.
18. *Nineteen years of high temperature superconductivity .*
· Plenary speech on "Osaka University-Asia Pacific-Vietnam National University, Hanoi Forum 2005 on Frontiers of Basic Science: Towards New Physics, Earth and Space Science, Mathematics", Hanoi, Vietnam, Sep. 27-29, 2005.
19. *Resonant Spin Hall Conductance in 2-Dimensional Electron Gas with Rashba Coupling in a Strong Magnetic Field.*
· APCTP Workshop on semiconductor nano-spintronics: spin-Hall effect and related issues, Pohang, Korea, August 10, 2005.
20. *Superconductivity in layered organic conductors .*
· International Workshop in Strongly Correlated Electrons, Kyoto, Japan, Nov. 2004.
21. *The physics behind high Tc superconducting cuprates: plain vanilla version of RVB.*
· Plenary talk on 2004 Taiwan International Conference on Superconductivity and the 7th Workshop on Low Temperature Physics, Penghu, Taiwan, July 5-9, 2004.
22. *Resonant Spin Hall Conductance in 2-Dimensional Electron Gas with Rashba Coupling in a Strong Magnetic Field.*
· 4th Workshop of International Center of Quantum Structure, Beijing China, June 2004.
23. *The physics behind high Tc superconducting cuprates: plain vanilla version of RVB.*
· OCPA2004, Shanghai, China, June, 2004.

24. *The physics behind high T_c superconducting cuprates: plain vanilla version of RVB.*
· International symposium on advanced magnetic technologies, Taipei, Nov. 13-16, 2003.
25. *Gossamer superconductivity.*
· Workshop on Novel Physics in Transition Metal Oxides, Sendai, Japan, Nov. 5-8, 2003.
26. *The physics behind high T_c superconducting cuprates: plain vanilla version of RVB.*
· Condensed Matter and Statistical Mechanics Annual Workshop, Shanghai, China, Oct., 2003.
27. *Gossamer superconductivity.*
· Workshop in Condensed Matter Physics, Nanjing, China, Oct. , 2003.
28. *Gossamer superconductivity.*
· International Conference on Magnetic Materials and Superconductivity, Rio, Brazil, May 25-30, 2003.
29. *Gossamer superconductivity.*
· 6th International Symposium on Spin-Charge-Photon Coupled Systems, Tokyo, Japan, Nov. 19, 2002.
30. *Gossamer superconductivity.*
· Workshop on Advanced Light Source at Berkeley National Laboratory, Oct.11, 2002.
31. *Microscopic models for high temperature superconductivity.*
· Plenary talk in Croucher Advanced Study Institute "New development in high T_c superconductivity theory", June 17-22, 2002.
32. *Theory of excitons in insulating copper oxides.*
· Plenary talk in Croucher Advanced Study Institute "New development in high T_c superconductivity theory", Hong Kong, June 17-22, 2002.
33. *Closing Remarks, Theory.*
· The 2002 International Conference on Physics and Chemistry of Molecular and Oxide Superconductors, Hsinchu, Taiwan, August 13 - 18, 2002.
34. *Theory of excitons in insulating copper oxides.*
· Invited talk in the American Physics Society March Meeting, Indiana, Mar. 18, 2002.
35. *Theory for insulating vanadium oxide.*
· Workshop of strongly correlated systems, Synchrotron Radiation Research Center, Hsinchu, Taiwan, Oct. 31 -Nov. 1, 2001.
36. *Theory for insulating vanadium oxide.*
· Workshop of Novel Quantum Phenomena in Transition Metal Oxides, Sendai, Japan, August, 2001.
37. *Recent developments in Mott insulator vanadium oxides.*
· The Third Oversea Chinese Physical Society Workshop, Hong Kong, August, 2000.
38. *Microscopic model for high T_c superconductivity.*
· Advanced Study Center, Tsinghua Univ., Beijing, China, July, 2000.

Selected List of Invited Lectures and Seminars (since 2000)

1. *Topological insulator.*
· Institute of Physics, Academia Sinica, Dec. 2009.
2. *Topological insulator.*
· National Taiwan University, Dec. 2009.
3. *Pairing symmetry in superconducting iron pnictides.*
· Kevlin Institute of Theoretical Physics, Univ. of California, Santa Barbara, USA, July, 2009.
4. *Recent development in condensed matter physics.*
· National Taiwan University, Jan. 2009.
5. *High temperature superconducting iron pnictides.*
· National Taiwan University, Oct. 2008.
6. *Polarized Ultracold Fermions in Optical Lattices.*
· ETH-Zurich, Feb. 2008.
7. *Possible supersolid in helium 4.*
· Univ. of Chicago, May 2007.
8. *Possible supersolid in helium 4.*
· Univ. of Wisconsin, May 2007.
9. *Theory for high T_c cuprates.*
· Shanghai Jiao Tong University, April 2007.
10. *Phenomenological Theory of Pseudogap Phase in High T_c .*
· Beijing Forum of High T_c , Nov. 2006.
11. *Light induced anomalous Hall effect in semiconductors with spin-orbit coupling.*
· First Fudan Conference of Quantum Control, Fudan University, June 2006.
12. *Rotational symmetry broken in sodium doped high T_c .*
· University College London, UK, April 2006.
13. *Rotational symmetry broken in sodium doped high T_c .*
· ISIS, Rutherford Laboratories, UK, April 2006.
14. *Recent Development in Condensed Matter Physics.*
· Yun-Nan University, May 2005.
15. *Recent Development in Condensed Matter Physics.*
· Nanjing University, with audience of undergraduate students, March 2005.
16. *Plain vanilla version of RVB theory for high T_c superconductivity.*
· Nanjing University, March 2005.
17. *Resonant spin Hall conductance in 2D electron gas in a magnetic field.*
· Fudan University, Shanghai, Dec. 2004.
18. *Resonant spin Hall conductance in 2D electron gas in a magnetic field.*
· Chinese University of Hong Kong, Hong Kong, Nov. 2004.
19. *Gossamer superconductivity in organic conductors.*
· ETH-Zurich, Sept. 2004.
20. *Resonant spin Hall conductance in 2D electron gas in a magnetic field.*
· The National University of Taiwan, Taipei, July 2004.

21. *Resonant spin Hall conductance in 2D electron gas in a magnetic field.*
· University College London, May 2004.
22. *Plain vanilla version of RVB theory for high T_c superconductivity.*
· Max Planck Institute, Stuttgart, May 2004.
23. *Plain vanilla version of RVB theory for high T_c superconductivity.*
· Theoretische Physik, ETH-Zurich, May 2004.
24. *Resonant spin Hall conductance in 2D electron gas in a magnetic field.*
· Nanjing Univ., China, April 2004.
25. *Resonant spin Hall conductance in 2D electron gas in a magnetic field.*
· Zhejiang Univ., China, March 2004.
26. *Resonant spin Hall conductance in 2D electron gas in a magnetic field.*
· Institute of Theoretical Physics, Beijing, China, Feb. 26, 2004.
27. *Plain vanilla version of RVB theory for high T_c superconductivity.*
· Center for Theoretical Sciences, Hsinchu, Taiwan, Nov. , 2003.
28. *Plain vanilla version of RVB theory for high T_c superconductivity.*
· Fudan University, Shanghai, China, Oct., 2003.
29. *Plain vanilla version of RVB theory for high T_c superconductivity.*
· Hong Kong University of Science and Technology, Sept., 2003.
30. *Gossamer superconductivity.*
· Institute of Physics, Chinese Academy of Sciences, Beijing, China, July 25, 2003.
31. *Gossamer superconductivity.*
· Zhejiang University, Hangzhou, Zhejiang, China, July 19, 2003.
32. *Gossamer superconductivity.*
· University of Cincinnati, June 2, 2003.
33. *Gossamer superconductivity.*
· University of Sherbrook, Canada, May 9, 2003.
34. *Carbon nanotubes and ladder Systems.*
· Center for Condensed Matter Materials, Taiwan University, Taiwan, March, 2003.
35. *Wonderful World of Spins.*
· Department of Physics, Taiwan University, Taiwan, March, 2003.
36. *Gossamer superconductivity.*
· University of Michigan, Ann Arbor, Feb. 11, 2003.
37. *Gossamer superconductivity.*
· Center for Theoretical Sciences, Hsinchu, Taiwan, Nov. 29, 2002.
38. *Gossamer superconductivity.*
· Institute of Theoretical Physics, Chinese Academy of Sciences, Beijing, China, Nov. 26, 2002.
39. *Gossamer superconductivity.*
· The University of Hong Kong, Nov. 22, 2002.
40. *Gossamer superconductivity.*
· Los Alamos National Laboratory, Sept. 9, 2002.

41. *Theory of exciton in insulating copper oxides.*
· Univ. of Southern California, USA, April 12, 2002.
42. *fractional and composite particles in condensed matter.*
· Institute of Theoretical Physics, Academic Sinica, Beijing, China, Dec., 2001.
43. *fractional and composite particles in condensed matter.*
· Zhejiang Univ., China, Dec., 2001.
44. *fractional and composite particles in condensed matter.*
· Hong Kong Univ., Dec., 2001.
45. *Magnetic systems with orbital degree of freedom.*
· ICTP, Trieste, Italy, August, 2001.
46. *Magnetic systems with orbital degree of freedom.*
· Advanced Study Center, Tsinghua Univ., Beijing, China, July, 2000.
47. *Strongly correlated electrons in condensed matter.*
· Fudan Univ., China, June, 2000.

Services

University and Faculty/College levels

Member, University Research Council, Univ. of Hong Kong (2009 - present)

Member, Public Policy Board of Graduate School, Univ. of Hong Kong (2006 - 2008)

Member, Selection Committee for Outstanding Young Scientist Award in Hong Kong (2006 - 2008)

Panel Member of Research Grant Council in Hong Kong (2006 - present)

Member, Search Committee of Dean of Faculty of Science, Univ. of Hong Kong (2005)

President, Physical Society of Hong Kong (2005 - 2007)

Departmental

Chair of the graduate student committee, Univ. of Cincinnati (02 - 03);

Co-chair of graduate student committee, Univ of Cincinnati (01 - 02);

Chair of the New Faculty Search Committee, Univ. of Cincinnati (90 - 91, and 99 - 00);

Scientific Reviewer for

Department of Energy, USA

National Science Foundation, USA;

Science

Nature

Review of Modern Physics

Physical Review Letters

Physical Review B

Journal of Physics: Condensed Matter, and A and D

Physical C

Journal of Modern Physics

Journal of Physical Society of Japan

Solid State Communication

Major collaborators in recent years

T. M. Rice, ETH- Zurich, Switzerland

Wei-Qiang Chen, Univ. of Hong Kong, Hong Kong

Kai-Yu Yang, ETH-Zurich, Switzerland

Shun-Qing Shen, Univ. of Hong Kong, Hong Kong
 Zidan Wang, Univ. of Hong Kong, Hong Kong
 Qiang-Hua Wang, Nanjing Univ., China
 Yi Zhou, Zhejiang Univ., China
 You-Quan Li, Zhejiang University, Hangzhou, China
 Jin-Hua Gao, Univ. of Hong Kong, Hong Kong
 Xiao-Yong Feng, Hangzhou Normal Univ, China
 Xin-Cheng Xie, Oklahoma State Univ., USA and Peking Univ., China
 Xi Dai, Institute of Physics, Beijing
 Yan Chen, Fudan Univ., Shanghai
 Xiao-Dong Cui, Univ. of Hong Kong, Hong Kong
 Zhuan Xu, Zhejiang Univ., China
 Guanghan Cao, Zhejiang Univ., China
 Haizhou Luo, Univ. of Hong Kong, Hong Kong

Postdoc Trained

Research Assistant Professor (RAP) and Postdocs:

Name	new position
Yong Ren (Postdoc 92-94),	Bank of Paris
Kingshuk Majumda, (Postdoc 99-00),	Lecturer in Berea College
Y. Yamashita (Postdoc, Apr 02 - May 03).	Japan
Yan Chen (RAP 03-07),	Prof. Fudan Univ. Shanghai
Xi Dai (RAP 04 - 07),	Prof. IOP, Chinese Academy of Sciences
Kaiyu Yang (Postdoc Sept 06 - Aug 07),	ETH-Zurich
Weiqiang Chen (Postdoc 06-08)	HKU
(RAP 09 - present)	current
Hongbo Zhao (RAP Nov 06 - Oct 09)	Prof. South China Sci and Tech. Univ.
Yi Zhou (Postdoc Apr 07 - Mar 08)	
(and Postdoc Apr 09 - Mar 10)	Special Researcher, Zhejiang Univ.
Fei Ye (Postdoc Aug 07 - Aug 08)	Assoc. Prof. Graduate School of CAS, Beijing
Jin-Hua Gao (Postdoc, Nov 08 - Oct 11)	current
Xiao-Yong Feng (Postdoc, Apr 09- Feb 10)	Assoc. Prof. Hangzhou Normal Univ.

Graduate students

Graduate Students (Year of Ph. D.; position immediately after Ph. D.;

Yu-dong Zhu (Ph. D. Cincinnati, 94)	postdoc at Columbia University
Kwai Kong Ng (Ph. D. Cincinnati, 98)	Fellow of Japanese Educational Department at Kyoto Univ. Faculty member at Tong Hai University, Taiwan postdoc at Florida State Univ.
Anuvrat Joshi (Ph. D. Cincinnati, 01) (co-chaired with M. Ma)	
Theja M. De Silva (Ph. D. Cincinnati, 04) (co-chaired with M. Ma)	postdoc at Cornell Assist. Professor at NY State Univ., USA
Anup Mishra (Ph. D. Cincinnati, 04) (co-chaired with M. Ma)	postdoc at MPI
Jing-Yu Gan (Ph. D. at ITP, CAS, 05) (co-supervised with Z. B. Su)	Assoc. Prof., IOP, CAS, Beijing
Kaiyu Yang, (Ph. D. at HKU 06)	postdoc at ETH-Zurich
Huaibin Zhuang, Ph. D. at HKU, 07	postdoc at IOP, CAS
Siegfried Gurtler, Ph. D. at HKU, 08,	postdoc at Univ. of Bonn
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