

Curriculum Vitae

Kun Yang

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Education

- Ph.D. in Physics, Indiana University, August 1994.
Thesis Title: Quantum Hall Physics in Low-Dimensional Strongly Correlated Systems.
Thesis Adviser: Professor Steven M. Girvin.
- M.S. in Physics, Indiana University, September 1991.
- B.S. in Physics, Fudan University, Shanghai, China, July 1989.

Research Interests

- Condensed Matter Theory; Strongly Correlated Many-Body Systems.
- Statistical Physics; Phase Transitions and Critical Phenomena.

Employment History

- Professor, Physics Dept., Florida State University, August 2007 to present.
- Associate Professor, Physics Dept., Florida State University, August 2004 to July 2007.
- Assistant Professor, Physics Dept., Florida State University, August 1999 to July 2004.
- Sherman Fairchild Senior Research Fellow, Caltech, August 1997 to August 1999.
- Postdoctoral Research Associate, Princeton University, September 1994 to July 1997.

Other Professional Experiences

- Affiliated Member, Condensed Matter Theory Center, University of Maryland, May 2006 – present.
- Visiting Professor, Physics Department, Fudan University, Shanghai, China, May 13 – June 1st, 2008; Dec. 7 – Dec. 24, 2009.
- Visiting Member, Pacific Institute for Theoretical Physics, Vancouver, Canada, 7/29/07 – 8/11/07.

- Visiting Professor, Physics Department, UCLA, 2/1/06 – 5/30/06.
- Visiting Professor, Physics Department, Harvard University, 9/1/05 – 1/31/06.
- Visiting Member, Kavli Institute for Theoretical Physics, University of California at Santa Barbara, 11/1/98 – 12/18/98; 5/3/04 – 5/28/04; 3/7/05 – 3/25/05; 2/27/06 – 5/26/06; 4/16/07 – 5/18/07; 2/9/09 – 6/12/09.
- Visiting Member, Kavli Institute for Theoretical Physics of China, 6/18/07 - 7/7/07.
- Visiting Professor, Zhejiang Institute of Modern Physics, Hangzhou, China, May 3 – June 24, 2002; June 1 – July 6, 2004; June 1 – July 29, 2006; May 28 – July 13, 2007.
- Visiting Member, Max Planck Institute for Physics of Complex Systems, Dresden, Germany, 7/10/03 – 7/25/03; 6/14/10 – 6/25/10.
- Visiting Member, Aspen Center for Physics, Summers of 1997, 2002, and 2003.

Honors and Awards

- Developing Scholar Award, Florida State University, 2007.
- Guangbiao Honorary Professorship, Zhejiang University, 2004.
- Outstanding Young Researcher Award, Overseas Chinese Physics Association, 2003.
- Research Innovation Award, Research Corporation, 2000.
- Alfred P. Sloan Research Fellowship, 1999.
- Sherman Fairchild Senior Research Fellowship, California Institute of Technology, 1997.
- Outstanding Graduate Student in Research Award, Physics Dept., Indiana Univ., 1994.

External Research Grants (solo PI unless noted otherwise)

- *Design Principles for Quantum Hall States*, Department of Energy Grant DE-SC0002140, 9/1/09 to 9/30/12, \$1,425,000. Co-PI with R. N. Bhatt (PI), F. D. M. Haldane and E. H. Rezayi (Co-PIs).
- *Unconventional Phases and Phase Transitions in Strongly Correlated Fermionic Systems*, National Science Foundation Grant DMR-0704133, 12/15/07 to 11/30/10, \$255,000.
- *Electron Interactions in Actin*, Department of Energy Grant DE-FG52-06NA26193, 8/1/06 to 7/31/09, \$1,800,000. Co-PI with Stanley Tozer (PI), J. R. Schrieffer, J. Cooley, P. Dixon, T. Murphy, E. Palm, P. Schlotmann, and J. Willit (Co-PIs).
- *Role of Disorder in Strongly Correlated Low-dimensional Systems*, National Science Foundation Grant DMR-0225698, 12/1/02 to 11/30/07, \$240,000.

- *Dynamics, Thermodynamics and Spin Transport in Random Quantum Spin Chains*, National Science Foundation Grant DMR-9971541, 6/1/99 to 11/30/02, \$150,000.
- *Effects of Disorder and Fluctuations in Fulde-Ferrell-Larkin-Ovchinnikov Superconductors*, Research Innovation Award, Research Corporation, 5/15/01 to 5/15/03, \$35,000.
- Alfred P. Sloan Research Fellowship, 9/15/99 to 9/15/03, \$35,000.

Internal and other Research Grants (solo PI unless noted otherwise)

- *Theoretical Study of Spintronics in Nanometer Scale Systems and other Novel Materials*, Cornerstone Program Enhancement Grant of Florida State University Research Foundation, 7/1/04 to 6/30/06, \$70,000.
- *Microwave Spectroscopy of 2D Electron Systems in Tilted Magnetic Field: Studies of Charge Density Wave Phases*, National High Magnetic Field Laboratory in-House Research Grant, 10/1/03 to 9/30/05, \$204,775. Co-PI with Lloyd Engel (PI) and Alan Dorsey (Co-PI).

Graduate Student Supervision as Major Professor

- Mr. Eddy Yusuf, May 2000 – July 2005; Ph.D. in Physics, summer 2005.
- Mr. Qinghong Cui, May 2002 – May 2007; Ph.D. in Physics, spring 2007.
- Mr. Wenxin Ding, Sept. 2006 – Present.

Supervision of Postdoctoral Associates

- Dr. Daniel F. Agterberg, Sept. 1999 – August 2000
- Dr. Xin Wan, Sept. 2000 – May 2003
- Dr. Anuvrat Joshi, Sept. 2001 – July 2003.
- Dr. Denis Dalidovich, Sept. 2003 – July 2004.
- Dr. Akakii Melikidze, Sept. 2003 – Sept. 2005.
- Dr. Alexander Seidel, Sept. 2006 – Jan. 2008.
- Dr. Yafis Barlas, Sept. 2008 – present.
- Dr. Seiji Yamamoto, Aug. 2009 – present.

Courses Taught at FSU

- Fall 1999: PHY 2048 General Physics A, 2 Recitation Sections and 2 Lab Sections (5 hrs, 30 students each).
- Spring 2000 and Fall 2008: PHY 2049 General Physics B, 2 Recitation Sections and 2 Lab Sections (5 hrs, 30 students each).
- Fall 2000, 2001, 2002, and 2003: PHY 5645 Quantum Mechanics A (3 hrs, about 25 students each).
- Spring 2001, 2002, 2003, and 2004: PHY 5646 Quantum Mechanics B (3 hrs, about 25 students each).
- Fall 2004: PHY2053C College Physics A (5 hrs, over 200 students).
- Fall 2009: PHZ5491 Condensed Matter Physics I (3 hrs, about 10 students each).
- Spring 2005, 2007, 2008 and 2010: PHZ5492 Condensed Matter Physics II (3 hrs, about 10 students each).
- Fall 2006 and 2007: PHY6938 Graduate Problem Solving Techniques (3 hrs, about 15 students each).
- Fall 2008: PHY5670 Quantum Many-Body Physics (3 hrs, 12 students).

Departmental and University Services

- Saturday Morning Physics Committee, 1999-2004.
- Proficiency Exam Committee, 1999/2000.
- Publicity and Awards Nomination Committee, 2000-2005.
- Chair's Search Committees, 2002/2003, and 2003/2004.
- Graduate Curriculum Study Group, 2004/2005.
- Departmental Colloquium Committee, 2006 to 2008; Chair, 2007/2008.
- Chair, Departmental Newsletter Committee, 2008 to present.
- Departmental Promotion and Tenure Committee, 2007 to present.
- National High Magnetic Field Lab Promotion Committee, 2009 to present.
- Ph. D. Dissertation Committees of Junjie Li, K. Nho, K. Forster, H. Park, L. Hormozi, Doan Nguyen, Cengiz Sen, Khaled Al Hassanieh, Kenny Purcell, and Patrick Robbins.
- Elected Faculty Senator, 2003-2005.

National and International Professional Services

- Coordinator, Kavli Institute for Theoretical Physics program on “Low Dimensional Electron Systems”, January 20, 2009 to June 12, 2009.
- Co-Chair of Organizing Committee, Fifth International Conference on Physical Phenomena at High Magnetic Fields, Tallahassee, 2005.
- Session chair, American Physical Society Annual March Meetings 2001, 2003, and 2005.
- Frequent referee for Science, Nature, Physical Review Letters, Physical Review, Europhysics Letters, European Journal of Physics, International Journal of Modern Physics, Physica, and other professional journals.
- Frequent proposal reviewer for National Science Foundation.

Other Professional Services

- Organizer of Display of *The Physics of Magnetism* at National High Magnetic Field Laboratory Open House, Feb. 2003.
- Judge, Capital Regional Science Fair, Tallahassee, Florida, Feb. 2003.
- External Ph.D. Dissertation Committee Member of Mr. George Ioannou Mias, Yale University (2007).

Invited Conference Presentations

1. *Quantum Phase Transitions and Iso-Spin Textures in Double Layer QHE Systems*, invited talk given at the 1994 American Physical Society Annual March Meeting, Pittsburgh, PA.
2. *Fate of Extended States and Localization Transition at Weak Fields*, invited talk given at the 1997 American Physical Society Annual March Meeting, Kansas City, MO.
3. *Random Antiferromagnetic Quantum Spin Chains*, invited talk given at the Workshop on Quantum Phase Transitions in Disordered Systems, July 24, 1997, Aspen, CO.
4. *Zeeman and Orbital Effects of a Magnetic Field Parallel to the Cu-O Plane in Cuprate Superconductors*, invited talk given at the Workshop on Strongly Correlated Electronic Systems, June 6, 1998, Center of Theoretical Sciences, Hsinchu, Taiwan.
5. *Recent Progress in Low-dimensional Disordered Quantum Magnets*, invited talk given at the Third Joint Meeting of Chinese Physicists World-Wide, Aug. 2000, Hong Kong.
6. *Zeeman Effect of a Magnetic Field and Fulde-Ferrell-Larkin-Ovchinnikov State in Unconventional Superconductors*, invited talk given at the Los Alamos Workshop on Excitations in Unconventionally Ordered Metals, Santa Fe, New Mexico, October 2001.

7. *Reconstruction of Fractional Quantum Hall Edges*, invited talk given at the 2002 American Physical Society Annual March Meeting, Indianapolis, Indiana; abstract: Bull. Amer. Phys. Soc. **45**, 724 (2002).
8. *A Toy Model for the Pseudogap Phase in Underdoped Cuprates*, invited talk given at the First Beijing Forum on the Mechanism of High- T_c Superconductivity, June 14 2002, Beijing.
9. *Quantum Hall Edge Reconstruction as a Quantum Phase Transition*, invited talk given at the International Seminar and Workshop on Quantum Phase Transitions, Max Planck Institute for Physics of Complex Systems, Dresden, Germany, July 17, 2003.
10. *Theory of Ferromagnetic Transition in One-Dimensional Itinerant Electron Systems*, invited talk given at the Kavli institute for Theoretical Physics Workshop on Exotic Order and Criticality in Quantum Matter, May 21, 2004.
11. *Theory of Ferromagnetic Transition in One-Dimensional Itinerant Electron Systems*, invited talk given at the 4th annual workshop of the International Center for Quantum Structures of Academia Sinica, Beijing, China, June 15, 2004.
12. *Theory of Ferromagnetic Transition in One-Dimensional Itinerant Electron Systems*, invited talk given at the 4th Joint Meeting of Chinese Physicists World-Wide, Shanghai, China, June 30, 2004.
13. *Theory of Ferromagnetic Transition in One-Dimensional Itinerant Electron Systems*, invited talk given at Yukawa International Seminar 2004: Physics of Strongly Correlated Electron Systems, Kyoto, Japan, Nov. 15, 2004.
14. *Valence Bond Glass States in Disordered Spin Systems*, invited talk given at the Princeton Center for Complex Materials Symposium on Valence Bonds in Condensed Matter, Princeton, Dec. 3, 2004.
15. *Theoretical Study of Fulde-Ferrell-Larkin-Ovchinnikov State in Unconventional Superconductors*, invited talk given at the 2005 American Physical Society Annual March Meeting, Los Angeles; abstract: Bull. Amer. Phys. Soc. **50**, 1391 (2005).
16. *Complexity at the Edge of Quantum Hall Liquids: Edge Reconstruction and its Consequences*, invited talk given at the Workshop on Complex Behavior in Correlated Electron Systems, Lorentz Center, Leiden University, Leiden, Netherland, Aug. 4, 2005.
17. *Realization, Characterization and Detection of FFLO and other Exotic Pairing States in Condensed Matter and Cold Atom Systems*, invited talk given at Institute for Nuclear Theory Workshop on Pairing in Fermionic Systems: Beyond the BCS Theory, Univ. of Washington, Seattle, Sept. 22, 2005.
18. *Measuring Charge and Statistics of Fractional Quantum Hall Quasiparticles through Edge State Transport*, invited talk given at the Mini-Workshop on Topological Quantum Computation, Zhejiang University, Hangzhou, China, July. 6, 2006.

19. *Novel Superfluid Phases with Pairing between Unbalanced Fermion Species in Condensed Matter and Cold Atom Systems*, invited talk given at the 2nd International Symposium on Cold Atom Physics of Chinese Academy of Science, Thousand Island Lake, Zhejiang, China, July 27, 2006.
20. *Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, invited talk given at The First Condensed Matter Theory Center Symposium, University of Maryland, November 8, 2006.
21. *Superfluid-Insulator Transition, Fermion Pairing and Supersymmetry in Bose-Fermi Mixtures*, invited talk given at the Kavli Institute for Theoretical Physics Workshop on Strongly Correlated Phases in Condensed Matter and Degenerate Atomic Systems, May 14, 2007.
22. *Superfluid-Insulator Transition and Fermion Pairing in Bose-Fermi Mixtures*, invited talk given at the Kavli institute for Theoretical Physics in China (KITPC) Workshop on Quantum Phases of Matter, July 5, 2007.
23. *Emergent Particles in Cold Atom Systems through Quantum Manipulation*, invited talk given at 2007 Fudan International Conference on Quantum Manipulation, Shanghai, December 7, 2007.
24. *Correlation Physics beyond Electrons: Novel Quantum Criticality and Emergent Particles in Trapped Cold Atom Systems*, invited talk given at Korea Institute for Advanced Study workshop “From correlated electrons to nanoscale materials”, Sept. 1st, 2008, Seoul, Korea.
25. *Numerical Studies of Quantum Hall States on a Disc: Toward Quantitative Understanding of Edge States*, invited talk given at Microsoft Station Q Fall Meeting, Dec. 13, 2008, Santa Barbara, CA.
26. *Numerical Studies of Quantum Hall States on a Disc: Toward Quantitative Understanding of Edge States*, invited talk given at The 3rd International Conference on Emergent Phenomena in Quantum Hall Systems (EPQHS3), July 25, 2009, Lucca, Italy.

Invited Lectures, Seminars and Colloquia

1. *Quantum Ferromagnetism and Phase Transitions in Double-Layer Quantum Hall Systems*, Condensed Matter Physics Seminar at AT&T Bell Labs, Murray Hill, Feb. 1994.
2. *Quantum Ferromagnetism and Phase Transitions in Double-Layer Quantum Hall Systems*, Condensed Matter Physics Seminar at Princeton University, February, 1994.
3. *Quantum Ferromagnetism and Phase Transitions in Double-Layer Quantum Hall Systems*, Condensed Matter Physics Seminar at Yale University, February, 1994.

4. *Quantum Ferromagnetism and Phase Transitions in Double-Layer Quantum Hall Systems*, Condensed Matter Physics Seminar at Rutgers University, February, 1994.
5. *Random Bonds and Topological Stability in Gapped Antiferromagnetic Quantum Spin Chains*, Condensed Matter Theory Seminar, AT&T Bell Labs, Nov. 29, 1995.
6. *Current Carrying States on a Lattice*, Condensed Matter Physics Seminar at Indiana University, April, 1996.
7. *Current Carrying States on a Lattice*, Condensed Matter Physics Seminar at University of Kentucky, April, 1996.
8. *Levitation of Extended States and Localization Transition in Two-Dimensions*, Condensed Matter Physics Seminar at University of Maryland, Oct. 17, 1996.
9. *Effects of Randomness in Gapped Antiferromagnetic Quantum Spin Chains*, Condensed Matter Physics Seminar at UCLA, Nov. 1996.
10. *Effects of Randomness in Gapped Antiferromagnetic Quantum Spin Chains*, Condensed Matter Physics Seminar at Penn. Stat Univ., Feb. 1997.
11. *Effects of Randomness in Gapped Antiferromagnetic Quantum Spin Chains*, Condensed Matter Physics Seminars at SUNY at Stony Brook, Feb. 1997.
12. *Effects of Randomness in Gapped Antiferromagnetic Quantum Spin Chains*, Condensed Matter Physics Seminars at Boston University, Feb. 1997.
13. *Percolation, Delocalization, and the Integer Quantum Hall Effect*, Colloquium at School of Physics, Georgia Institute of Technology, Feb. 24, 1997.
14. *Effects of Randomness in Gapped Antiferromagnetic Quantum Spin Chains*, Condensed Matter Physics Seminar at University of Cincinnati, Apr. 1997.
15. *Random Antiferromagnetic Quantum Spin Chains*, Condensed Matter Physics Seminars at Ohio State University, Nov. 17, 1997.
16. *Response of a d-wave Superconductor to a Zeeman Magnetic Field*, Condensed Matter Physics Seminar at Indiana University, Nov. 18, 1997.
17. *Response of a d-wave Superconductor to a Zeeman Magnetic Field*, Condensed Matter Physics Seminar at Boston University, Jan. 16, 1998.
18. *Random Antiferromagnetic Quantum Spin Chains*, Condensed Matter Physics Seminar at Stanford University, Jan. 8, 1998.
19. *Percolation, Delocalization, and the Integer Quantum Hall Effect*, Colloquium at Department of Physics, University of Colorado, Feb. 11, 1998.
20. *Random Antiferromagnetic Quantum Spin Chains*, Condensed Matter Physics Seminar at University of Colorado, Feb. 12, 1998.

21. *Random Antiferromagnetic Quantum Spin Chains*, Condensed Matter Physics Seminar at Iowa State University, Feb. 17, 1998.
22. *Random Antiferromagnetic Quantum Spin Chains*, Condensed Matter Physics Seminar at Florida State University, Mar. 6, 1998.
23. *Zeeman and Orbital Effects of an in-Plane Magnetic Field in Cuprate Superconductors*, Condensed Matter Physics Seminar at California Inst. of Technology, April 13, 1998.
24. *Percolation, Delocalization, and the Integer Quantum Hall Effect*, Colloquium at Department of Physics, The Ohio State University, Apr. 29, 1998.
25. *Random Antiferromagnetic Quantum Spin Chains*, Condensed Matter Physics Seminar at UC Santa Cruz, April 30, 1998.
26. *Zeeman and Orbital Effects of an in-Plane Magnetic Field in Cuprate Superconductors*, Condensed Matter Physics Seminar at UC San Diego, May 6, 1998.
27. *Zeeman and Orbital Effects of an in-Plane Magnetic Field in Cuprate Superconductors*, Colloquium at Physics Dept., UNLV, Sept. 11, 1998.
28. *Random Antiferromagnetic Quantum Spin Chains*, Condensed Matter Physics Seminar at Zhejiang Univ., Hangzhou, China, May 5th, 1999.
29. *Zeeman and Orbital Effects of an in-Plane Magnetic Field in Cuprate Superconductors*, Condensed Matter Physics Seminar at Zhejiang Univ., Hangzhou, China, May 6, 1999.
30. *Zeeman and Orbital Effects of an in-Plane Magnetic Field in Cuprate Superconductors*, Condensed Matter Physics Seminar at Fudan Univ., Shanghai, China, May 11, 1999.
31. *Zeeman and Orbital Effects of an in-Plane Magnetic Field in Cuprate Superconductors*, Condensed Matter Physics Seminar at University of Southern California, Nov. 19, 1999.
32. *Zeeman and Orbital Effects of an in-Plane Magnetic Field in Cuprate Superconductors*, Colloquium at Physics Dept., Florida State Univ., Jan. 27, 2000.
33. *A Toy Model for the Pseudogap Phase in Underdoped Cuprates*, Condensed Matter Physics Seminar at University of Houston, Feb. 15, 2001.
34. *A Toy Model for the Pseudogap Phase in Underdoped Cuprates*, Condensed Matter Physics Seminar at University of Texas at Austin, Feb. 16, 2001.
35. *A Toy Model for the Pseudogap Phase in Underdoped Cuprates*, Condensed Matter Physics Seminar at University of Florida, Apr. 16, 2001.
36. *Reconstruction of Fractional Quantum Hall Edges*, Condensed Matter Physics Seminar at Princeton University, Sept. 24, 2001.

37. *Reconstruction of Fractional Quantum Hall Edges*, Condensed Matter Physics Seminar at Bell Labs, Lucent Technologies, Murray Hill, New Jersey, Sept. 26, 2001.
38. *A Toy Model for the Pseudogap Phase in Underdoped Cuprates*, Condensed Matter Physics Seminar at Yale University, Sept. 27, 2001.
39. *Reconstruction of Fractional Quantum Hall Edges*, Condensed Matter Physics Seminar at University of Georgia, Feb. 13, 2002.
40. *A Toy Model for the Pseudogap Phase in Underdoped Cuprates*, Colloquium at Zhejiang Institute for Modern Physics, Hangzhou, China, May 10, 2002.
41. *Reconstruction of Fractional Quantum Hall Edges*, Colloquium at Zhejiang Institute for Modern Physics, Hangzhou, China, June 7, 2002.
42. *A Toy Model for the Pseudogap Phase in Underdoped Cuprates*, Condensed Matter Physics Seminar at Ohio State University, Sept. 30, 2002.
43. *A Toy Model for the Pseudogap Phase in Underdoped Cuprates*, Condensed Matter Physics Seminar at University of Kentucky, Oct. 1, 2002.
44. *Magnetism, Superfluidity, and Chiral Edge States in Quantum Hall Systems – Why are People still Working on the Quantum Hall Effect after Two Nobel Prizes?* Colloquium at Physics Department, University of Cincinnati, Oct. 3, 2002.
45. *Reconstruction of Fractional Quantum Hall Edges*, Condensed Matter Physics Seminar at University of Toronto, Nov. 4, 2002.
46. *Magnetism, Superfluidity, and Chiral Edge States in Quantum Hall Systems – Why are People still Working on the Quantum Hall Effect after Two Nobel Prizes?* Colloquium at Physics Department, Florida State University, Apr. 3, 2003.
47. *Reconstruction of Fractional Quantum Hall Edges*, Condensed Matter Physics Seminar at University of Bochum, Germany, July 18, 2003.
48. *A Toy Model for the Pseudogap Phase in Underdoped Cuprates*, Condensed Matter Physics Seminar at Leibniz Institute for Solid State and Materials Research, Dresden, Germany, July 22, 2003.
49. *Reconstruction of Fractional Quantum Hall Edges*, Condensed Matter Physics Seminar at University of Texas, Austin, Nov. 6, 2003.
50. *Magnetism, Superfluidity, and Chiral Edge States in Quantum Hall Systems – Why are People still Working on the Quantum Hall Effect after Two Nobel Prizes?* Colloquium at Physics Department, University of South Florida, Mar. 19, 2004.
51. *Theory of Ferromagnetic Transition in One-Dimensional Itinerant Electron Systems*, Condensed Matter Physics Seminar given at Zhejiang University, Hangzhou, China, June 3, 2004.

52. *Magnetism, Superfluidity, and Chiral Edge States in Quantum Hall Systems – Why are People still Working on the Quantum Hall Effect after Two Nobel Prizes?* Colloquium at Zhejiang University, Hangzhou, China, June 17, 2004.
53. *Reconstruction of Fractional Quantum Hall Edges*, Condensed Matter Physics Seminar at National High Magnetic Field Laboratory, Tallahassee, Sept. 3, 2004.
54. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, Condensed Matter Physics Seminar given at Univ. of British Columbia, Sept. 19, 2005.
55. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, Condensed Matter Physics Seminar given at Univ. of Toronto, Sept. 26, 2005.
56. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, Condensed Matter Physics Seminar given at Harvard Univ., Sept. 29, 2005.
57. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, Condensed Matter Physics Seminar given at Boston College, Oct. 12, 2005.
58. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, Condensed Matter Physics Seminar given at Yale Univ., Oct. 20, 2005.
59. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, Chez Pierre (Condensed Matter) Seminar given at MIT, Dec. 12, 2005.
60. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, Condensed Matter Seminar given at UC Irvine, Feb. 8, 2006.
61. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, Colloquium given at UCLA, Feb. 16, 2006.
62. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, Joint Condensed Matter/AMO seminar given at Rice University, Apr. 3, 2006.
63. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, Condensed Matter Seminar given at USC, Apr. 14, 2006.

64. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, Condensed Matter Seminar given at UC Riverside, Apr. 19, 2006.
65. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, Seminar given at Institute of Theoretical Physics, Chinese Academy of Science, Beijing, June. 14, 2006.
66. *Magnetism, Superfluidity, Topology, and Chiral Edge States in Quantum Hall Systems – Why are People still Working on the Quantum Hall Effect after Two Nobel Prizes?* T. D. Lee Lecture delivered at Graduate School of Chinese Academy of Science, Beijing, China, June 15, 2006.
67. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, High Energy Seminar given at Tsinghua University, Beijing, June. 16, 2006.
68. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, Colloquium given at Florida State University, Aug. 31, 2006.
69. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, Condensed Matter Seminar given at Penn. State Univ., Jan. 23, 2007.
70. *Find Your Partner or Expel Your Competitor: Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, Condensed Matter Seminar given at Caltech, April. 2, 2007.
71. *Simplicity and Complexity at the Edge of Quantum Hall Liquids: Chiral Luttinger Liquid, Edge Reconstruction, and non-Abelian Quasiparticles*, Seminar at Microsoft Research, Santa Barbara, May 3, 2007.
72. *Pairing and Superfluidity in Fermionic Systems: BCS Theory and Beyond*, Series of Lectures given at Zhejiang University, Hangzhou, China. Part I: *BCS Theory, BCS-BEC Crossover, and Pauli Limiting*, May 30, 2007; Part II: *Exotic Pairing States in Fermionic Superfluids with Unbalanced Pairing Species*, June 12, 2007; Part III: *Superfluid-Insulator Transition and Fermion Pairing in Bose-Fermi Mixtures*, June 12, 2007.
73. *Magnetism, Superfluidity, and Chiral Edge States in Quantum Hall Systems – Why are People still Working on the Quantum Hall Effect after Two Nobel Prizes?* Colloquium at Physics Department, Beijing University of Science and Technology, June 27, 2007.
74. *Simplicity and Complexity at the Edge of Quantum Hall Liquids: Chiral Luttinger Liquid, Edge Reconstruction, and non-Abelian Quasiparticles*, Seminar at Institute of Physics, Beijing, July 4th, 2007.

75. *Superfluid-Insulator Transition, Fermion Pairing and Supersymmetry in Bose-Fermi Mixtures*, Condensed Matter Physics Seminar given at Univ. of British Columbia, Aug. 1st, 2007.
76. *Simplicity and Complexity at the Edge of Quantum Hall Liquids: Chiral Luttinger Liquid, Edge Reconstruction, and non-Abelian Quasiparticles*, Seminar at Simon Fraser University, Aug. 2nd, 2007.
77. *Simplicity and Complexity at the Edge of Quantum Hall Liquids: Chiral Luttinger Liquid, Edge Reconstruction, and non-Abelian Quasiparticles*, Seminar at Los Alamos National Lab, Nov. 7, 2007.
78. *Novel Quantum Criticality and Emergent Particles in Trapped Cold Atom Systems*, Seminar at Condensed Matter Theory Center, University of Maryland, April 4, 2008.
79. *Novel Quantum Criticality and Emergent Particles in Trapped Cold Atom Systems*, Condensed Matter Seminar at Purdue University, May 2, 2008.
80. *The Quantum Hall Effects*, set of six two-hour lectures at Fudan University, May 2008.
81. *Novel Quantum Criticality and Emergent Particles in Trapped Cold Atom Systems*, Condensed Matter Seminar at Washington University (St. Louis), Dec. 8, 2008.
82. *Novel Quantum Criticality and Emergent Particles in Trapped Cold Atom Systems*, Condensed Matter Seminar at UCLA, May 20, 2009.
83. *Novel Quantum Criticality and Emergent Particles in Trapped Cold Atom Systems*, Keck Seminar at Rice Univ., May 26, 2009.
84. *Probing non-Abelian Quasiparticle Statistics at the Edge and in the Bulk of Quantum Hall Liquids*, Condensed Matter Seminar at Princeton Univ., Sept. 23, 2009.