

# Curriculum Vitae

## Tao Han

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Nationality: Naturalized US citizen

Marital Status: Married to Dandan Sun; Children: Crystal and Vanessa

## Education

Aug. 1985–Jun. 1990 Doctor of Philosophy at the University of Wisconsin-Madison

Sep. 1980–Sep. 1983 Master of Science Degree in Physics, Nankai University, P.R.China

Mar. 1977–Sep. 1980 Undergraduate in Theoretical Physics, Nankai University, P.R.China

## Professional Positions Held

Sept. 2014–present Distinguished Professor of High Energy Physics,  
Kenneth P. Dietrich School of Arts & Sciences, University of Pittsburgh

Sept. 2011–present Director, Pittsburgh Particle physics, Astrophysics and Cosmology  
Center (PITT PACC), University of Pittsburgh

Sept. 2011–Sept. 2014 Professor at the Dept. of Physics & Astronomy  
University of Pittsburgh

Mar. 2006–July 2011 Co-Director, Institute for Elementary Particle Physics Research  
University of Wisconsin, Madison

April 2001–July 2011 Professor at the Dept. of Physics  
University of Wisconsin, Madison

- Sep. 1997–April 2001 Associate Professor at the Dept. of Physics  
University of Wisconsin, Madison
- July 1997–Dec. 1997 Associate Professor II at the Dept. of Physics  
University of California, Davis
- July 1993–July 1997 Assistant Professor at the Dept. of Physics  
University of California, Davis
- Sep. 1990–July 1993 Postdoctoral Research Associate in the Theory Group  
Fermi National Accelerator Laboratory
- Jun. 1990–Sep. 1990 Postdoctoral Research Associate in the Phenomenology Institute  
University of Wisconsin-Madison
- Aug. 1986–Jun. 1990 Research Assistant in the Phenomenology Institute  
University of Wisconsin-Madison
- Jan. 1986–Aug. 1986 Teaching Assistant in the Physics Department,  
University of Wisconsin-Madison

## Awards and Honors

1. National Superconducting Super-Collider (SSC) Fellowship (1991–1992)
2. Awards from University of California–Davis Committee on Research (1993–1997)
3. H.I. Romnes Faculty Fellowship at the University of Wisconsin (2001–2006)
4. Hilldale Undergraduate/Faculty Research Award, UW-Madison (2001)
5. Deutsches Elektronen-Synchrotron (DESY, Germany) Guest Professorship  
(June–August, 2002)
6. Elected Fellow of the American Physical Society (APS, 2003)
7. Vilas Associate Research Award, UW-Madison (2004–2006)
8. Fermi National Accelerator Laboratory Frontier Fellowship (2004)
9. Appointed Member of HEPAP (High Energy Physics Advisory Panel for DOE and  
NSF, 2013–2016; 2021 DPF ex-officio)
10. KIAS Scholar at Korea Institute for Advanced Study, South Korean (2013–2016)
11. Opening plenary speaker at *The 26<sup>th</sup> International Symposium on Lepton-Photon  
Interactions at High Energies*, San Francisco, June 24, 2013

12. Distinguished Professor of High Energy Physics (2014–present),  
Kenneth P. Dietrich School of Arts & Sciences, University of Pittsburgh
13. Elected to APS April Meeting Chair line: Vice Chair (2018), Chair-elect (2019),  
Chair (2020), Past Chair (2021).
14. Elected to APS DPF Chair line: Vice Chair (2019), Chair-elect (2020), Chair  
(2021), Past Chair (2022).
15. Elected Fellow of American Association for the Advancement of Science (AAAS,  
2019).

## Membership in Professional Societies

- Life-time member of American Physical Society (APS), and elected Fellow (2003)
- Life-time member of Organization of Chinese Physics & Astro-physics (OCPA)
- Member of American Association for the Advancement of Science (AAAS) (since 2015),  
and elected Fellow (2019)
- Member of Collaboration of Theoretical and Experimental QCD (CTEQ) (2012-present)
- Elected general member of Aspen Center for Physics (2016-present)

## Grants

Current extramural grants:

1. DOE, PI for research program: *Phenomenology in the LHC Era*, University of  
*Pittsburgh*, under Contract No. DE-FG02-12ER41832.
2. NSF, PI for conference funds for *Phenomenology Symposia*.
3. DOE, PI for conference funds for *Phenomenology Symposia*.
4. DOE, PI for conference funds for *CTEQ Summer School*.

## Teaching Activities

- At the University of Pittsburgh:

Physics 3102: Special Topics on Collider Phenomenology (Advanced graduate students, Spring 2012).

Physics 0110: Non-calculus based General Physics (Non-science major undergraduate students, Fall 2012).

Physics 0110: Non-calculus based General Physics (Non-science major undergraduate students, Fall 2013).

Physics 0111: Non-calculus based General Physics (Non-science major undergraduate students, Fall 2014).

Physics 2566: Quantum Mechanics II (Graduate students, Spring 2016).

Physics 2566: Quantum Mechanics II (Graduate students, Spring 2017).

Physics 3101: Special Topics on Collider Physics (Advanced graduate students, Fall 2018).

Physics 3717: Particle Physics (Advanced undergrads and graduate students, Fall 2019).

- At the University of Wisconsin–Madison:

Physics 103: Non-calculus general physics (Fall 2008, Spring 2009, Fall 2009).

Physics 104: Non-calculus general physics (Fall 2002).

Physics 201: General physics for engineering undergraduate students (Spring 2001; Spring 2002; Spring 2003, Spring 2010).

Physics 202: General physics for engineering undergraduate students (Spring 1998; Fall 2001; Spring 2006, Fall 2010).

Physics 208: General physics for Science/Mathematics undergraduates (Spring 2007).

Physics 535: Introduction to Particle Physics (Fall 2000).

Physics 731: Graduate Quantum Mechanics I (Fall 2003; Fall 2005).

Physics 732: Graduate Quantum Mechanics II (Spring 2004).

Physics 831: Quantum Field Theory I (Fall 1999; Fall 2006).

Physics 832: Quantum Field Theory II (Spring 1999; Spring 2000; Spring 2007).

Physics 835: Collider Physics (Fall 1998; Fall 2007).

Sabbatical leave: Fall 2004 – Summer 2005.

Research leave: Spring 2008.

- At the University of California–Davis:

1. Winter quarter 1994, Physics 250 (special topics on High Energy Physics).

2. Spring quarter 1994, Physics 5B (General Physics for bio-science and pre-medical students).

3. Fall quarter 1994, Physics 250 (special topics on high energy physics).
4. Winter quarter of 1995, Physics 5B.
5. Spring quarter 1995, Physics 245B (High Energy Physics for graduate students: electroweak interactions).
6. Fall quarter of 1995, Physics 9B (General physics for physical sci. & engineering students).
7. Winter quarter of 1996, Physics 130A (particle Physics for undergraduate students).
8. Spring quarter of 1996, Physics 245B.
9. Fall quarter of 1996, Physics 9B.
10. Winter quarter of 1997, Physics 250 (Contemporary Issues in High Energy Physics).

## Supervision of Students

1. At the Department of Physics & Astronomy, University of Pittsburgh:
  - Current graduate students:  
Hongkai Liu, Yang Ma, Han Qin, Iris Leung
  - Past graduate students:
    - #14. Stefanus (PhD 2014, computer industry)
    - #15. Richard Ruiz (PhD 2015, postdoc at , CP3, Belgium)  
Yongcheng Wu (PhD 2016, postdoc at the Oklahoma State University)
    - #16. Zhen Liu (PhD 2015, postdoc at Univ. of Maryland)
    - #17. Joumou Chen (PhD 2017, postdoc at Korea Institute of Advanced Studies)
    - #18. Zhuoni Qian (PhD 2017, postdoc at Institute for Basic Sciences, Korea)
    - #19. Xing Wang (PhD 2019, postdoc at UCSD)
    - #20. Barmak Shams Es Haghi (PhD 2019, postdoc at University of Utah)
  - Past undergraduate students:  
Daniel Salmon (honor senior thesis, 2014)
2. At the Department of Physics, University of Wisconsin–Madison:

- Past graduate students:
    - #2. Jing Jiang (PhD 2001, finance industry)
    - #3. Danny Marfatia (PhD 2001, Professor of Physics, University of Hawaii)
    - #4. Y.-J. Kim (PhD 2002, computer industry)
    - #5. Bob McElrath (PhD 2003, computer industry)
    - Kenny Cheng (MS 2003)
    - #6. Piyabut Burikham (PhD 2005, Professor, Chulalongkorn University, Thailand)
    - #7. Anupama Atre (PhD 2007)
    - #8. Gui-Yu Huang (PhD 2008, academic administration)
    - #9. Kai Wang (PhD 2008, Associate Professor at Zhe-Jiang University, China)
    - #10. Tong Li (PhD 2008, Assistant Professor at Nankai University, China)
    - Zhi-Hui Wang (PhD 2011, joint with Harbin Institute of Technology, China)
    - #11. Ian Lewis (PhD 2011, Professor of Physics, University of Kansas)
    - Camilo A. Garcia (MS 2011, postdoc at University of Brussels)
    - #12. Zhe Dong (PhD 2012, Industry in Deep Learning)
    - #13. Jared Schmitthener (PhD 2012, Industry at EPIC, Wisconsin)
    - Tian-Hong Wang (PhD 2013, professor at Harbin Institute of Technology, China)
  - Past undergraduate students:
    - Josh Friess (honor senior thesis, 2002)
3. At the Department of Physics, University of California–Davis:
- Graduate student:
    - #1. R. Sobey (PhD 1998, computer industry)

## Supervision of Postdocs

- Current postdocs:
  - Cédric Weiland
  - Keping Xie

- Past postdocs:
  - Ralph Hempfling (Computer industry)
  - James Ohnemus (Energy industry)
  - Kingman Cheung (Professor at National Tsing-Hua University, Taiwan)
  - Jim Kelly (Asst. Prof. of Physics at Centre College, Danville, KY)
  - Chung Kao (Professor at U. of Oklahoma)
  - Renjie Zhang (Finance industry)
  - Graham Kribs (Professor at Univ. of Oregon)
  - Tilman Plehn (W3 professor at U. of Heidelberg)
  - Cheng-Wei Chiang (Professor at National Taiwan University)
  - Lian-Tao Wang (Associate professor at University of Chicago)
  - Heather Logan (Professor at Carleton University, Canada)
  - Patrick Huber (Associate professor at VPI)
  - Hooman Davoudiasl (Former Dirac Fellow at UW-Madison, staff scientist at BNL, 2008 Presidential Early Career Award for Scientists and Engineers)
  - Devin Walker (Assistant professor at Dartmouth College)
  - Kathryn Zurek (Professor at CalTech)
  - Thomas McElmurry (Lecturer at Rochester University)
  - Ian-Woo Kim (Computer industry)
  - Pavel Fileviez Perez (Former Dirac Fellow at UW-Madison, Assistant Professor at Case Western Reserve University)
  - Sogee Spinner (Industry)
  - Maike Trenkel (Industry)
  - Keith Lee (Postdoc at Perimeter Institute, Canada)
  - Neil Christensen (Former PITT PACC Fellow, Assistant professor, Illinois State University)
  - Susanne Westhoff (Carl Zeiss Junior Professorship, Heidelberg, Germany)
  - Joshua Sayre (Associate Editor, Physical Review D, APS)
  - David McKeen (Former PITT PACC Fellow, Junior faculty, TRUMF, Canada)
  - Satyanarayan Mukhopadhyay (Former PITT PACC Fellow, Assistant professor at IACS, India)
  - Brock Tweedie (IT industry)
  - Dorival Goncalves (Assistant professor, Oklahoma State University)
  - Ahmed Ismail (Assistant professor, Oklahoma State University)
  - Joshua Berger (Former PITT PACC Fellow, Assistant professor, Colorado State University)
  - Tathagata Ghosh (Junior staff scientist at HRI, India)

## **Research Activities**

### (1). Publications in Refereed Journals

(Author's list in alphabetical order)

Based on INSPIRE (<http://inspirehep.net>):

Total published papers in refereed journals 229; Total journal citations over 21,400 times;  
Top-cited single paper over 1,030 cites; All papers h-index: 91.

1985:

1. *Production of Charged and Neutral Higgs Bosons in High Energy Lepton-Nucleon Interactions*  
(T. Han and H. C. Liu), Z. Phys. **C28** (1985) 295.

1986:

2. *Exploring the Gluon Structure by the Jet-Charge-Cross Section Method*  
(F.-M. Kong, T. Han, M. Luo and N. Wen),  
Acta Phys. Sinica **35** (1986) 152 (in Chinese with English abstract).
3. *Direct Test of Photon Structure Function*  
(M. Luo, Z.-J. Chen, T. Han and G. Yue),  
Acta Phys. Sinica **35** (1986) 161 (in Chinese with English abstract).

1987:

4. *Limits on New Quarks and Majorons from  $\Gamma_Z/\Gamma_W$*   
(V. Barger, N. G. Deshpande, T. Han and R. J. N. Phillips),  
Phys. Lett. **B192** (1987) 212.
5. *Improved Transverse-mass Variable for Detecting Higgs-Boson Decays into Z Pairs*  
(V. Barger, T. Han and R. J. N. Phillips), Phys. Rev. **D36** (1987) 295.
6. *Extraction of Higher-Twist Contribution from Large- $p_T$  Pion-photoproduction Processes*  
(D. Du, T. Han, F.-M. Kong, and M. Luo), Phys. Rev. **D36** (1987) 740.
7. *Testing the Effect of Higher-Twist Subprocess in  $\bar{p}p$  and  $pp$  Collisions*  
(D. Du, T. Han, F.-M. Kong, and M. Luo), Phys. Rev. **D36** (1987) 745 .
8.  *$B_d^0 - \bar{B}_d^0$  Oscillations and the Top Quark Mass*  
(V. Barger, T. Han, D. V. Nanopoulos and R. J. N. Phillips)  
Phys. Lett. **B194** (1987) 312.
9. *Probing the Higgs Sector at the SSC: the Standard Model and Beyond*  
(J. F. Gunion *et al.*), Int. J. Mod. Phys. **A2** (1987) 957.

1988:

10. *Heavy Leptons at Hadron Supercolliders*  
(V. Barger, T. Han and J. Ohnemus), Phys. Rev. **D37** (1988) 1174.
11. *Improving the Heavy-Higgs-Boson Four-charged-lepton Signature*  
(V. Barger, T. Han and R. J. N. Phillips), Phys. Lett. **B206** (1988) 339.
12. *Improving the Heavy-Higgs-Boson Two-charged-lepton-two-neutrino Signal*  
(V. Barger, T. Han and R. J. N. Phillips), Phys. Rev. **D37** (1988) 2005.



13. *Triple Gauge Boson Production at  $e^+e^-$  and  $pp$  Supercolliders*  
(V. Barger and T. Han), Phys. Lett. **B212** (1988) 117.
14. *Double Higgs-Boson Bremsstrahlung from  $W$  and  $Z$  Bosons at Supercolliders*  
(V. Barger, T. Han and R. J. N. Phillips), Phys. Rev. **D38** (1988) 2766.
- 1989:
15.  *$WWZ$ ,  $ZZZ$ , and  $WW\gamma$  Production at  $e^+e^-$  Colliders*  
(V. Barger, T. Han and R. J. N. Phillips), Phys. Rev. **D39** (1989) 146.
16. *Constraints on Exotic Particles from Tevatron Missing Transverse Momentum Data*  
(V. Barger, K. Hagiwara, T. Han and D. Zeppenfeld), Phys. Lett. **B220** (1989) 464.
17. *Toponium Decay to a Higgs Boson and Bottom Quarks*  
(V. Barger, T. Han and W.-Y. Keung), Int. J. Mod. Phys. **A4** (1989) 3015.
18. *Large  $p_T$  Weak Boson Production at the Tevatron*  
(V. Barger, T. Han, J. Ohnemus and D. Zeppenfeld), Phys. Rev. Lett. **62** (1989) 1971.
19. *Perturbative QCD Calculations of Weak Boson Production in Association with Jets at Hadron Colliders*  
(V. Barger, T. Han, J. Ohnemus and D. Zeppenfeld), Phys. Rev. **D40** (1989) 2888.
20. *Some New Aspects of Supersymmetry  $R$ -Party Violating Interactions*  
(V. Barger, G. F. Giudice and T. Han), Phys. Rev. **D40** (1989) 2987.
21. *QCD Predictions for the Jet Activity in Direct Photon Events at the Tevatron*  
(V. Barger, T. Han, J. Ohnemus, and D. Zeppenfeld), Phys. Lett. **B232** (1989) 371.
- 1990:
22. *Four Weak Boson Production at  $e^+e^-$  and  $pp$  Supercolliders*  
(V. Barger, T. Han, and Hong Pi), Phys. Rev. **D41** (1990) 824.
23. *Pair Production of  $\gamma$ ,  $Z$ , and  $W$  in Association with Jets*  
(V. Barger, T. Han, J. Ohnemus and D. Zeppenfeld), Phys. Rev. **D41** (1990) 2782.
24. *Double Higgs-Boson Production via  $WW$  Fusion in  $TeV$   $e^+e^-$  Collisions*  
(V. Barger and T. Han), Mod. Phys. Lett. **A5** (1990) 667.
25. *Testing The  $ZWW$  Coupling at LEP I*  
(V. Barger and T. Han), Phys. Lett. **B241** (1990) 127.
26. *Higgs Boson Production in Higher-order Electroweak Processes at  $e^+e^-$  Supercolliders*  
(V. Barger, T. Han and A. L. Stange), Phys. Rev. **D42** (1990) 777.
27. *Strong  $W^+W^+$  Scattering Signals at  $pp$  Supercolliders*  
(V. Barger, K. Cheung, T. Han, and R. J. N. Phillips), Phys. Rev. **D42** (1990) 3052.
- 1991:

28. *Intermediate Mass Higgs Boson at Hadron Supercolliders*  
(V. Barger, G. Bhattacharya, T. Han and B. A. Kniehl), Phys. Rev. **D43** (1991) 779.
29. *A Comparative Study of the Benefits of Forward Jet Tagging in Heavy Higgs Production at the SSC*  
(V. Barger, K. Cheung, T. Han, J. Ohnemus and D. Zeppenfeld), Phys. Rev. **D44** (1991) 1426.
30. *Single Forward Jet-Tagging and Central Jet-Vetoing to Identify the Leptonic WW Decay Mode of a Heavy Higgs Boson*  
(V. Barger, K. Cheung, T. Han and D. Zeppenfeld)  
Phys. Rev. **D44** (1991) 2701; Erratum: Phys. Rev. **D48** (1993) 5444.
31. *QCD Correction to the  $pp \rightarrow WH$  and  $ZH$  Total Cross Sections*  
(T. Han and S. Willenbrock), Phys. Lett. **B273** (1991) 167.
- 1992:
32. *Full Tree Level Calculation of The  $qq \rightarrow qqWZ$  Electroweak Process at Hadron Supercolliders*  
(V. Barger, K. Cheung, T. Han, A. Stange and D. Zeppenfeld)  
Phys. Rev. **D46** (1992) 2028.
33. *Test of the Dimopoulos-Hall-Raby Ansatz for Fermion Mass Matrices*  
(V. Barger, M. Berger, T. Han and M. Zralek), Phys. Rev. Lett. **68** (1992) 3394.
34. *Transverse Momentum Distribution of Z-Boson Pairs at Hadron Supercolliders*  
(T. Han, R. Meng and J. Ohnemus), Nucl. Phys. **B384** (1992) 59.
35. *Structure-Function Approach to Vector-Boson Scattering in pp Collisions*  
(T. Han, G. Valencia and S. Willenbrock), Phys. Rev. Lett. **69** (1992) 3274.
- 1993:
36. *Heavy Top Quark Searches in The Di-lepton Mode at The Tevatron*  
(T. Han and S. Parke), Phys. Rev. Lett. **71** (1993) 1494.
37. *QCD Corrections to Hadronic  $W\gamma$  Production with Non-standard  $WW\gamma$  Couplings*  
(U. Baur, T. Han and J. Ohnemus), Phys. Rev. **D48** (1993) 5140.
38. *Finding the Leptonic WW Decay Mode of a Heavy Higgs Boson at Hadron Supercolliders*  
(V. Barger, K. Cheung, T. Han and D. Zeppenfeld), Phys. Rev. **D48** (1993) 5433.
- 1994:
39. *The Strongly Interacting WW System: Gold-Plated Modes*  
(J. Bagger, V. Barger, K. Cheung, G. Gunion, T. Han, G. Ladinsky, R. Rosenfeld and C.-P. Yuan), Phys. Rev. **D49** (1994) 1246.
40. *Amplitude Zeros in  $W^\pm Z$  Production*  
(U. Baur, T. Han and J. Ohnemus) Phys. Rev. Lett. **72**, 3941 (1994).

41. *Production of Weak Bosons and Higgs Bosons in  $e^-e^-$  Collisions*  
(V. Barger, J. Beacom, T. Han and K. Cheung), Phys. Rev. **D50**, 6704 (1994).
- 1995:
42. *Search for Anomalous Couplings at  $e\gamma$  Colliders*  
(K. Cheung, S. Dawson, T. Han and G. Valencia), Phys. Rev. **D51**, 5 (1995).
43. *Standard Model Higgs Physics at a 4 TeV Upgraded Tevatron*  
(J. F. Gunion and T. Han), Phys. Rev. **D51**, 1051 (1995).
44.  *$W^\pm Z$  Production at Hadron Colliders: Effects of Non-standard  $WWZ$  Couplings and QCD Corrections*  
(U. Baur, T. Han and J. Ohnemus), Phys. Rev. **D51**, 3381 (1995).
45. *Probing Strongly Interacting Electroweak Dynamics through  $W^+W^-/ZZ$  Ratios at future  $e^+e^-$  Colliders*  
(V. Barger, K. Cheung, T. Han and R. Phillips), Phys. Rev. **D52**, 3815 (1995).
46. *LHC Analysis of the Strongly Interacting  $WW$  System: Gold-Plated Modes*  
(J. Bagger, V. Barger, K. Cheung, G. Gunion, T. Han, G. Ladinsky, R. Rosenfeld and C.-P. Yuan), Phys. Rev. **D52**, 3878 (1995).
47.  *$s$ -Channel Higgs Boson Production at a Muon-Muon Collider*  
(V. Barger, M. Berger, J. Gunion and T. Han), Phys. Rev. Lett. **75** 1462 (1995).
48. *Triple Electroweak Gauge-Boson Production at Fermilab Tevatron Energies*  
(T. Han and R. Sobey), Phys. Rev. **D52**, 6302 (1995).
49. *Top-quark Decay via Flavor Changing Neutral Currents at Hadron Colliders*  
(T. Han, R. Peccei and X.M. Zhang), Nucl. Phys. **B454**, 527 (1995).
- 1996:
50. *QCD Corrections and Non-standard Three-Vector-Boson Couplings in  $W^+W^-$  Production at Hadron Colliders*  
(U. Baur, T. Han and J. Ohnemus), Phys. Rev. **D53**, 1098 (1996).
51. *Study of Anomalous Couplings at a 500-GeV  $e^+e^-$  Linear Collider with Polarized Beams*  
(A. A. Likhoded, T. Han and G. Valencia), Phys. Rev. **D53**, 4811 (1996).
52. *Multiple Interactions in Two Photon Collisions*  
(M. Drees and T. Han), Phys. Rev. Lett. **76**, 3076 (1996).
53. *Higgs Boson and  $W_L W_L$  Scattering at  $e^-e^-$  Colliders*  
(T. Han), Int. J. Mod. Phys. **A11**, 1541 (1996).
54. *A Model of Low-Lying States in Strongly Interacting Electroweak Symmetry Breaking Sector*  
(T. Han, J. Huang and P.Q. Hung), Mod. Phys. Lett. **A11**, 1131 (1996).
55. *Searching for  $t \rightarrow cg$  at the Fermilab Tevatron*  
(T. Han, K. Whisnant, B.L. Young and X.M. Zhang), Phys. Lett. **B385**, 311 (1996).

56. *Signals for Double Parton Scattering at the Fermilab Tevatron*  
(M. Drees and T. Han), Phys. Rev. Lett. **77**, 4142 (1996).
57. *Studying a Strongly Interacting Electroweak Sector via Longitudinal Gauge Boson Scattering at a Muon Collider*  
(V. Barger, M. Berger, J. Gunion and T. Han), Phys. Rev. **D55**, 142 (1996).
- 1997:
58. *Higgs Boson Physics in the  $s$ -Channel at  $\mu^+\mu^-$  Colliders*  
(V. Barger, M. Berger, J. Gunion and T. Han), Phys. Rep. **86**, 1 (1997).
59. *Top-quark Decay via the Anomalous Coupling  $\bar{t}c\gamma$  at Hadron Colliders*  
(T. Han, K. Whisnant, B.L. Young and X.M. Zhang), Phys. Rev. **D55**, 7241 (1997).
60. *Precision Higgs Boson Mass Determination at Lepton Colliders*  
(V. Barger, M. Berger, J. Gunion and T. Han), Phys. Rev. Lett. **78**, 3991 (1997)
61.  *$W\gamma\gamma$  Production at the Fermilab Tevatron Collider: Gauge Invariance and Radiation Amplitude Zero*  
(U. Baur, T. Han, N. Kauer, R. Sobey and D. Zeppenfeld), Phys. Rev. **D56**, 140 (1997).
62. *Precision  $W$ -boson and Top-quark Mass Determination at a Muon Collider*  
(V. Barger, M. Berger, J. Gunion and T. Han), Phys. Rev. **D56**, 1714 (1997).
63. *Messenger Sneutrino as Cold Dark Matter*  
(Tao Han and Ralf Hempfling), Phys. Lett. **B415**, 161 (1997).
- 1998:
64. *Sparticle Production in Electron-photon Collisions*  
(V. Barger, T. Han and J. Kelly), Phys. Lett. **B419**, 233 (1998).
65. *QCD Corrections and Anomalous Couplings in  $Z$ -gamma Production at Hadron Colliders*  
(U. Baur, T. Han and J. Ohnemus), Phys. Rev. **D57**, 2823 (1998).
66. *Quartic Gauge Boson Couplings at Linear Colliders: Interplay of  $WWZ/ZZZ$  Production and  $WW$ -Fusion*  
(Tao Han, Hong-Jian He and C.P. Yuan), Phys. Lett. **B422**, 294 (1998).
67. *Strongly-interacting Electroweak Sector at  $e^-e^-$  Colliders*  
(T. Han), Int. J. Mod. Phys. **A13** 2337, (1998).
68. *Direct Messenger-Matter Interactions in Gauge-Mediated Supersymmetry Breaking Models*  
(Tao Han and R.-J. Zhang), Phys. Lett. **B428**, 120 (1998).
69. *Measuring the Coupling of a Higgs Boson to  $ZZ$  at Linear Colliders*  
(J.F. Gunion, T. Han and R. Sobey), Phys. Lett. **B429**, 79 (1998).
70.  *$R$ -Parity Violation and Sneutrino Resonances at Muon Colliders*  
(Jonathan L. Feng, J. Gunion and Tao Han), Phys. Rev. **D58**, R071701 (1998).

71. *Single Top Quark Production via FCNC Couplings at Hadron Colliders*  
(T. Han, M. Hosch, K. Whisnant, Bing-Lin Young and X. Zhang), Phys. Rev. **D58**, 073008 (1998).
72. *Adjoint Messengers and Perturbative Unification at the String Scale.*  
(T. Han, T. Yanagida and R.-J. Zhang), Phys. Rev. **D58**, 095011 (1998).
- 1999:
73. *Extending the Higgs Boson Reach at the Upgraded Fermilab Tevatron*  
(Tao Han and Ren-Jie Zhang), Phys. Rev. Lett. **82**, 25 (1999).
74. *Chargino Mass Determination at a Muon Collider*  
(V. Barger, M.S. Berger and T. Han), Phys. Rev. **D59**, 071701 (1999).
75. *Exploiting  $h \rightarrow W^*W^*$  Decays at the Upgraded Fermilab Tevatron*  
(Tao Han, Andre S. Turcot and Ren-Jie Zhang), Phys. Rev. **D59**, 093001 (1999).
76. *Slepton Oscillations at  $e\gamma$  Colliders*  
(J.-J. Cao, Tao Han, X.-Mi. Zhang and G.-R. Lu), Phys. Rev. **D59**, 095001 (1999).
77. *Discovery Limits for Techniomega Production in  $e\gamma$  Collisions*  
(Stephen Godfrey, Tao Han and Pat Kalyniak), Phys. Rev. **D59**, 095006 (1999).
78. *On Kaluza-Klein States from Large Extra Dimensions*  
(Tao Han, Joseph D. Lykken and Ren-Jie Zhang), Phys. Rev. **D59**, 105006 (1999).
79. *Top-Charm Associated Production in High-Energy  $e^+e^-$  Collisions*  
(Tao Han and JoAnne L. Hewett), Phys. Rev **D60**, 074015 (1999).
80. *Status of Muon Collider Research and Development and Future Plans*  
(Charles M. Ankenbrandt et al.), Phys. Rev. ST Accel. Beams **2**, 081001 (1999).
81. *Astrophysical Constraints on Large Extra Dimensions*  
(V. Barger, T. Han, C. Kao and R.-J. Zhang), Phys. Lett. **B461**, 34 (1999).
82. *Drell-Yan Plus Missing Energy as a Signal for Extra Dimensions*  
(Tao Han, D. Rainwater and D. Zeppenfeld), Phys. Lett. **B463**, 93 (1999).
- 2000:
83. *A Gauge-mediated Supersymmetry Breaking Model with an Extra Singlet Higgs Field*  
(T. Han, D. Marfatia and R.-J. Zhang), Phys. Rev. **D61**, 013007 (2000).
84.  *$e^+e^- \rightarrow t\bar{t}H$  with Non-standard Higgs Boson Couplings*  
(T. Han, T. Huang, Z.-H. Lin, J.-X. Wang and X. Zhang), Phys. Rev. **D61**, 015006 (2000).
85. *Measuring CP Violating Phases at a Future Linear Collider*  
(V. Barger, T. Han, T.-J. Li and T. Plehn), Phys. Lett. **B475**, 342 (2000).
86. *Diphoton Signals for Large Extra Dimensions at the Tevatron and the CERN LHC*  
(O. Eboli, T. Han, M. Magro and P. Mercadante), Phys. Rev. **D61**, 094007 (2000).
87. *Top Quark Decay via R-parity Violating Interactions at the Tevatron*  
(T. Han and M. Magro), Phys. Lett. **B476**, 79 (2000).

88. *Physics Potential of a Tevatron Tripler*  
(V. Barger, K. Cheung, T. Han, C. Kao, T. Plehn and R.-J. Zhang), Phys. Lett. **B478**, 224 (2000).
89. *Higgs Boson Decays to tau-pairs in the s-channel at a Muon Collider*  
(V. Barger, T. Han and C.-G. Zhou), Phys. Lett. **B480**, 140 (2000).
90. *Oblique Parameter Constraints on Large Extra Dimensions*  
(T. Han, D. Marfatia and R.-J. Zhang), Phys. Rev. **D62**, 125018 (2000).
91. *Cosmology and Hierarchy in Stabilized Warped Brane Models*  
(V. Barger, T. Han, T. Li, J. Lykken and D. Marfatia), Phys. Lett. **B488**, 97 (2000).
- 2001:
92. *Top-quark Couplings to TeV Resonances at Future Lepton Colliders*  
(T. Han, Y.J. Kim, A. Likhoded and G. Valencia), Nucl. Phys. **B593**, 415 (2001).
93.  *$h \rightarrow \mu\tau$  at Hadron Colliders*  
(T. Han and D. Marfatia), Phys. Rev. Lett. **86**, 1442 (2001).
94.  *$\tan\beta$  Determination From Heavy Higgs Boson Production at Linear Colliders*  
(V. Barger, T. Han and J. Jiang), Phys. Rev. **D63**, 075002 (2001).
95. *CP Violating ZZH Coupling at  $e^+e^-$  Linear Colliders*  
(T. Han and J. Jiang), Phys. Rev. **D63**, 096007 (2001).
96. *CP Violating Phases in SUSY, Electric Dipole Moments, and Linear Collider*  
(V. Barger, T. Falk, T. Han, J. Jiang, T. Li and T. Plehn), Phys. Rev. **D64**, 056007 (2001).
97. *Top-quark Rare Decay  $t \rightarrow ch$  in R-Parity-Violating SUSY*  
(G. Eilam, A. Gemintern, T. Han, J.M. Yang and X. Zhang), Phys. Lett. **B510**, 227 (2001).
98. *Radion Effects on Unitarity in Gauge Boson Scattering*  
(T. Han, Graham D. Kribs and Bob McElrath), Phys. Rev. **D64**, 076003 (2001).
99. *Search for  $t \rightarrow ch$  at  $e^+e^-$  Linear Colliders*  
(T. Han, J. Jiang and M. Sher), Phys. Lett. **B516**, 337 (2001).
100. *The Snowmass Points and Slopes: Benchmarks for SUSY Searches*  
(B.C. Allanach *et al.*), Eur. Phys. J. **C25**, 113 (2002).
- 2002:
101. *Top-quark Spin Correlation at Linear Colliders with Anomalous Couplings*  
(Z.H. Lin, T. Han, T. Huang, J.X. Wang, and X. Zhang), Phys. Rev. **D65**:014008 (2002).
102. *Phenomenology of High-energy Neutrinos in Low Scale Quantum Gravity Models*  
(J. Alvarez-Muniz, F. Halzen, T. Han, and D. Hooper), Phys. Rev. Lett. **88**, 021301 (2002).

103.  *$h \rightarrow \mu^+ \mu^-$  via Gluon Fusion at the LHC*  
(T. Han and Bob McElrath), Phys. Lett. **B528**, 81 (2002).
104. *Testing Radiative Neutrino Mass Generation via R-Parity Violation at the Tevatron*  
(V. Barger, T. Han, S. Hesselbach, and D. Marfatia), Phys. Lett. **B538**, 346 (2002).
105. *Detecting Microscopic Black Holes with Neutrino Telescopes*  
(J. Alvarez-Muniz, Jonathan L. Feng, F. Halzen, T. Han, and D. Hooper), Phys. Rev. **D65**:124015 (2002).
106. *Snowmass Points and Slopes: Benchmarks for SUSY Searches*  
(B.C. Allanach *et al.*), Eur. Phys. J. **C25**, 113 (2002).
107. *TeV String State Excitation via High-energy Cosmic Neutrinos*  
(J. Friess, T. Han, and D. Hooper), Phys. Lett. **B547**, 31 (2002).
108.  *$\tau - \mu$  Flavor Violation as a Probe of the Scale of New Physics*  
(D. Black, T. Han, H.-J. He, and Marc Sher), Phys. Rev. **D66**:053002 (2002).

2003:

109.  *$gg \rightarrow h \rightarrow \tau^+ \tau^-$  at the Upgraded Fermilab Tevatron*  
(A. Belyaev, T. Han, and R. Rosenfeld), JHEP **0307**, 021 (2003)
110. *Black Hole Evaporation with Separated Fermions*  
(T. Han, G.D. Kribs, and B. McElrath), Phys. Rev. Lett. **90**,031601 (2003).
111. *Phenomenology of the Little Higgs Model*  
(T. Han, H.E. Logan, B. McElrath, and L.-T. Wang), Phys. Rev. **D67**, 095004 (2003).
112. *Determinating  $\tan \beta$  with Neutral and Charged Higgs Bosons at a Future  $e^+ e^-$  Linear Collider*  
(J. Gunion, T. Han, J. Jiang, and A. Sopczak), Phys. Lett. **B565**, 42 (2003).
113. *TeV Resonances in Top Physics at the LHC*  
(T. Han, D. Rainwater, and G. Valencia), Phys. Rev. **D68**:015003 (2003).
114. *Effects of Genuine Dimension-six Higgs Operators*  
(V. Barger, T. Han, P. Langacker, B. McElrath, and P. Zerwas), Phys. Rev. **D67**, 115001 (2003).
115. *Loop-induced Little Higgs Decays  $H \rightarrow gg, \gamma\gamma$*   
(T. Han, H.E. Logan, B. McElrath, and L.-T. Wang), Phys. Lett. **B563**, 191 (2003).
116. *Status of Muon Collider Research and Development and Future Plans*  
Muon Collider/Neutrino Factory Collaboration (Mohammad M. Alsharoa *et al.*), Phys. Rev. ST Accel. Beams **6**, 081001 (2003).

2004:

117. *Effects of Electroweak Instantons in High-Energy Neutrino Telescope*  
(T. Han and D. Hooper), Phys. Lett. **B582**, 21 (2004).

118. *Bounds on Four-Fermion Contact Interactions Induced by String Resonances*  
(P. Burikham, T. Han, F. Hussain, and D. McKay), Phys. Rev. **D69**, 095001, (2004).
119. *Hadron Collider Signatures for New Interactions of Top and Bottom Quarks*  
(T. Han, G. Valencia, and Y. Wang), Phys. Rev. **D70**, 034002 (2004).
120. *The FCNC Top-Squark Decay as a Probe of Squark Mixing*  
(T. Han, K.-I. Hikasa, J.M. Yang, and X. Zhang), Phys. Rev. **D70**, 055001 (2004).
121. *The Higgs Sector in a  $U(1)$  Extension of the MSSM*  
(T. Han, P. Langacker, and B. McElrath), Phys. Rev. **D70**, 115006, (2004).
122. *The Particle Physics Reach of High-energy Neutrino Astronomy*  
(T. Han and Dan Hooper), New J. Phys. **6**, 150 (2004).
- 2005:
123. *Associated Production of a Top Quark and a Charged Higgs Boson*  
(E.L. Berger, T. Han, J. Jiang, and T. Plehn), Phys. Rev. **D71**, 115012 (2005).
124. *Scale of Quantum Gravity*  
(T. Han and S. Willenbrock), Phys. Lett. **B616**, 215 (2005).
125. *TeV-Scale String Resonances at Hadron Colliders*  
(P. Burikham, T. Figy and T. Han), Phys. Rev. **D71**, 01600 (2005).
126. *Upper Bounds on Lepton-number Violating Processes*  
(A. Atre, V. Barger, and Tao Han), Phys. Rev. **D71**, 113014 (2005).
127. *Discovering an Invisible Decaying Higgs at Hadron Colliders*  
(H. Davoudiasl, Tao Han, and H.E. Logan), Phys. Rev. **D71**, 115007 (2005).
128. *Neutrino Masses and Lepton-number violation in the Littlest Higgs Scenario,*  
(Tao Han, H.E. Logan, B. Mukhopadhyaya, and R. Srikanth)  
Phys. Rev. **D72**, 053007 (2005).
- 2006:
129. *Exotic Neutrino Interactions at the Pierre Auger Observatory*  
(L. Anchordoqui, T. Han, D. Hooper, and S. Sarkar), Astropart. Phys. **.25**, 14 (2006).
130. *Smoking-gun Signatures of Little Higgs Models*  
(T. Han, H.E. Logan, and Lian-Tao Wang), JHEP **0601**, 099 (2006).
131. *Anomalous gauge couplings of the Higgs Boson at high energy photon colliders*  
(T. Han, Yu-Ping Kuang, and Bin Zhang), Phys. Rev. **D73**, 055010 (2006).
132. *Signatures for Majorana neutrinos at hadron colliders*  
(T. Han and Bin Zhang), Phys. Rev. Lett. **97**, 171804 (2006).
- 2007:
133. *QCD corrections to single slepton production at hadron colliders*  
(Y.-Q. Chen, T. Han, and Z.-G. Si), JHEP **0705**, 068 (2007).



134. *Pair production of doubly-charged scalars: Neutrino mass constraints and signals at the LHC*  
(T. Han, B. Mukhopadhyaya, Z. Si, and K. Wang), Phys. Rev. **D76**, 075013 (2007).
135. *LHC Signals for Warped Electroweak Neutral Gauge Bosons*  
(K. Agashe, H. Davoudiasl, S. Gopalakrishna, T. Han, Gui-Yu Huang, G. Perez, Z.-G. Si, A. Soni), Phys. Rev. **D76**, 115015 (2007).
- 2008:
136. *Top Quark Pairs at High Invariant Mass – A Model-Independent Discriminator of New Physics at the LHC*  
(V. Barger, T. Han, and D.G.E. Walker), Phys. Rev. Lett. **100**, 031801 (2008).
137. *Phenomenology of hidden valleys at hadron colliders*  
(T. Han, Z.-G. Si, K. M. Zurek, and M. J. Strassler), JHEP **0807**, 008 (2008).
138. *Higgs Signal for  $h \rightarrow aa$  at Hadron Colliders*  
(M. Carena, T. Han, G.-Y. Huang, C.E.M. Wagner), JHEP **0804**, 092 (2008).
139. *Charged Higgs Boson Effects in the Production and Decay of a Heavy Majorana Neutrino at the CERN LHC*  
(S. Bar-Shalom, G. Eilam, T. Han, and A. Soni), Phys. Rev. **D77**, 115019 (2008).
140. *Testing a Neutrino Mass Generation Mechanism at the LHC*  
(P. Fileviez Perez, T. Han, G.-Y. Huang, T. Li, and K. Wang), Phys. Rev. **D78**, 071301 (2008), Rapid Communication.
141. *Neutrino Masses and the CERN LHC: Testing Type II Seesaw*  
(P. Fileviez Perez, T. Han, G.-Y. Huang, T. Li, and K. Wang), Phys. Rev. **D78**, 015018 (2008).
142. *The “Top Priority” at the LHC*  
(Tao Han), Int. J. Mod. Phys. **A23** 4107, (2008).
143. *Flavour physics of leptons and dipole moments*  
(M. Raidal et al.), Eur. Phys. J. **C57**, 13 (2008).
- 2009:
144. *Top Quark Pair plus Large Missing Energy at the LHC*  
(T. Han, R. Mahbubani, D.G.E. Walker, and L.-T. Wang), JHEP 0905:117,2009.
145. *Heavy Quarks Above the Top at the Tevatron*  
(A. Atre, M. Carena, T. Han, J. Santiago), Phys. Rev. **D79**, 054018 (2009).
146. *Leptoquarks and Neutrino Masses at the LHC*  
(P. Fileviez Perez, T. Han, T. Li, M.J. Ramsey-Musolf), Nucl. Phys. **B819**, 139 (2009).
147. *The Search for Heavy Majorana Neutrinos*  
(Anupama Atre, Tao Han, Silvia Pascoli, and Bin Zhang), JHEP 0905:030,2009.
148. *LHC Signals for Warped Electroweak Charged Gauge Bosons*  
(K. Agashe, S. Gopalakrishna, T. Han, G.-Y. Huang, and A. Soni), Phys.Rev.D80:075007,2009.

149. *Testability of Type I Seesaw at the CERN LHC: Revealing the Existence of the B-L Symmetry*  
(Pavel Fileviez Perez, Tao Han, Tong Li), Phys.Rev.D80:073015,2009.
150. *Like-sign Di-lepton Signals in Higgsless Models at the LHC*  
(Tao Han, Hai-Shan Liu, Ming-xing Luo, Kai Wang, Wei Wu), Phys.Rev.D80:095010,2009.
- 2010:
151. *LHC Signals for Coset Electroweak Gauge Bosons in Warped/Composite PGB Higgs Models*  
(Kaustubh Agashe, Aleksandr Azatov, Tao Han, Yingchuan Li, Zong-Guo Si, and Lijun Zhu), Phys.Rev.D81:096002,2010.
152. *QCD Corrections to Scalar Diquark Production at Hadron Colliders*  
(Tao Han, Ian Lewis, and Thomas McElmurry), JHEP 1001:123,2010.
153. *Nearly Degenerate Gauginos and Dark Matter at the LHC*  
(Gian F. Giudice, Tao Han, Kai Wang, Lian-Tao Wang), Phys.Rev.D81:115011,2010.
154. *Genuine CP-odd Observables at the LHC*  
(Tao Han and Yingchuan Li), Phys. Lett. B683:278, 2010.
155. *New Physics Signals in Longitudinal Gauge Boson Scattering at the LHC*  
(Tao Han, David Krohn, Lian-Tao Wang, and Wenhan Zhu), JHEP 1003:082,2010.
156. *Mu-Tau Production at Hadron Colliders*  
(Tao Han, Ian Lewis, and Marc Sher), JHEP 1003:090,2010.
157. *Higgs Boson Searches and the H b anti-b Coupling at the LHeC*  
(Tao Han and Bruce Mellado), Phys.Rev.D82:016009,2010.
158. *Top Quarks as a Window to String Resonances*  
(Zhe Dong, Tao Han, Min-xin Huang, Gary Shiu), JHEP 1009:048,2010.
159. *Testing CP Violation in ZZH Interactions at the LHC*  
(Neil D. Christensen, Tao Han, Yingchuan Li), Phys.Lett.B693:28-35,2010.
160. *Collider Signatures for Heavy Lepton Triplet in Type I+III Seesaw*  
(Abdesslam Arhrib, Borut Bajc, Dilip Kumar Ghosh, Tao Han, Gui-Yu Huang, Ivica Puljak, and Goran Senjanovic), Phys.Rev.D82:053004,2010.
161. *Kinematic Cusps: Determining the Missing Particle Mass at the LHC*  
(Tao Han, Ian-Woo Kim, Jeonghyeon Song), Phys.Lett.B693:575-579,2010.
162. *Chiral Couplings of W' and Top Quark Polarization at the LHC*  
(Shrihari Gopalakrishna, Tao Han, Ian Lewis, Zong-guo Si, Yu-Feng Zhou), Phys.Rev.D82:115020,2010.
163. *Colored Resonant Signals at the LHC: Largest Rate and Simplest Topology*  
(Tao Han, Ian Lewis, Zhen Liu), JHEP 1012:085,2010.
- 2011:
164. *Lepton Number Violation from Colored States at the LHC*  
Pavel Fileviez Perez, Tao Han, Sogee Spinner, Maike K. Trenkel, JHEP 1101:046,2011.

165. *Model-Independent Searches for New Quarks at the LHC*  
Anupama Atre, Georges Azuelos, Marcela Carena, Tao Han, Erkan Ozcan, Jose Santiago, Gokhan Unel, JHEP 1108:080,2011.
166. *Phenomenology of a lepton triplet*  
Antonio Delgado, Camilo Garcia Cely, Tao Han, Zhihui Wang, Phys.Rev.D84:073007,2011.
- 2012:
167. *Discovery in Drell-Yan Processes at the LHC*  
Cheng-Wei Chiang, Neil D. Christensen, Gui-Jun Ding, Tao Han, Phys.Rev.D85:015023, 2012.
168. *Baryon number violation at the LHC: the top option*  
Zhe Dong, Gauthier Durieux, Jean-Marc Gerard, Tao Han, Fabio Maltoni, Phys.Rev.D85:016006, 2012.
169. *MSSM Higgs Bosons at the LHC*  
Neil D. Christensen, Tao Han, Shufang Su, Phys.Rev.D85:115018, 2012.
170. *Kinematic Cusps With Two Missing Particles I: Antler Decay Topology*  
Tao Han, Ian-Woo Kim, Jeonghyeon Song, Phys.Rev. D87 (2013) 035003.
171. *Kinematic Cusps with Two Missing Particles II: Cascade Decay Topology*  
Tao Han, Ian-Woo Kim, Jeonghyeon Song, Phys.Rev. D87 (2013) 035004.
172. *Pair Production of MSSM Higgs Bosons in the Non-decoupling Region at the LHC*  
Neil D. Christensen, Tao Han, Tong Li, Phys.Rev. D86 (2012) 074003.
173. *Resummation Effects in Vector-Boson and Higgs Associated Production*  
S. Dawson, T. Han, W.K. Lai, A.K. Leibovich, I. Lewis, Phys.Rev. D86 (2012) 074007.
174. *New Physics from the Top at the LHC*  
Chien-Yi Chen, Ayres Freitas, Tao Han, Keith S.M. Lee, JHEP 1211 (2012) 124.
- 2013:
175. *Potential of Direct Measurement of the Higgs Boson Total Width at a Muon Collider*  
Tao Han, Zhen Liu, Phys. Rev. D87 (2013) 033007.
176. *Lepton Number Violation and  $W'$  Chiral Couplings at the LHC*  
Tao Han, Ian Lewis, Richard Ruiz, Zong-guo Si, Phys. Rev. D87 (2013) 035011.
177. *Dark Matter and Higgs Bosons in the MSSM*  
Tao Han, Z. Liu, A. Natarajan, JHEP 1311 (2013) 008.
178. *Low-Mass Higgs Bosons in the NMSSM and Their LHC Implications*  
Neil D. Christensen, Tao Han, Zhen Liu, Shufang Su, JHEP 1308 (2013) 019.
179. *Non-Decoupling MSSM Higgs Sector and Light Superpartners*  
Tao Han, Tong Li, Shufang Su, Lian-Tao Wang, JHEP 1311 (2013) 053.
180. *Electroweakinos in the Light of the Higgs Boson*  
Tao Han, S. Padhi, S. Su, Phys. Rev. D88 (2013) 115010.

2014:

181. *Higgs Bosons from Top Quark Decays*  
Tao Han, Richard Ruiz, Phys. Rev. D89 (2014) 074045.
182. *First Look at the Physics Case of TLEP*  
TLEP Design Study Working Group Collaboration (M. Bicer (Ankara U.) et al.),  
JHEP 1401 (2014) 164.
183. *Potential Precision on Higgs Couplings and Total Width at the ILC*  
Tao Han, Zhen Liu, Josh Sayre, Phys.Rev. D89 (2014) 113006.
184. *Light Neutralino Dark Matter: Direct/Indirect Detection and Collider Searches*  
Tao Han, Zhen Liu, Shufang Su, JHEP 1408 (2014) 093.
185. *Determining the Dark Matter Particle Mass through Antler Topology Processes at Lepton Colliders*  
Neil D. Christensen, Tao Han, J. Song, Stefanus, Phys.Rev. D90 (2014) 114029.

2015:

186. *Radiative Return for Heavy Higgs Boson at a Muon Collider*  
Nabarun Chakrabarty, Tao Han, Zhen Liu, Biswarup Mukhopadhyaya  
Phys.Rev. D91 (2015) 1, 015008.
187. *Top-Quark Initiated Processes at High-Energy Hadron Colliders*  
Tao Han, Joshua Sayre, Susanne Westhoff, JHEP 1504 (2015) 145.
188. *Heavy Majorana neutrinos from  $W\gamma$  fusion at hadron colliders*  
Daniel Alva, Tao Han, Richard Ruiz, JHEP 1502 (2015) 072.
189. *Heavy Color-Octet Particles at the LHC*  
Chien-Yi Chen, Ayres Freitas, Tao Han, Keith S. M. Lee, JHEP 1505 (2015) 135.
190. *Improving Higgs coupling measurements through ZZ Fusion at the ILC*  
Tao Han, Zhen Liu, Zhuoni Qian, Joshua Sayre, Phys.Rev. D91 (2015) 113007.
191. *Characterizing Invisible Electroweak Particles through Single-Photon Processes at High Energy  $e^+e^-$  Colliders*  
Seong Youl Choi, Tao Han, Jan Kalinowski, Krzysztof Rolbiecki, Xing Wang,  
Phys. Rev. D92 (2015) 9, 095006.
192. *To the Bottom of the Sbottom*  
Tao Han, Shufang Su, Yongcheng Wu, Bin Zhang, Huanian Zhang,  
Phys. Rev. D92 (2015) 11, 115009.

2016:

193. *Muon  $g - 2$  in the aligned two Higgs doublet model*  
Tao Han, Sin Kyu Kang and Joshua Sayre, JHEP 1602 (2016) 097.
194. *Physics Opportunities of a 100 TeV Proton-Proton Collider*  
Nima Arkani-Hamed, Tao Han, Michelangelo Mangano, Lian-Tao Wang,  
Phys. Rept. 652 (2016) 1-49.

195. *ISR effects for resonant Higgs production at future lepton colliders*  
Mario Greco, Tao Han, Zhen Liu, Phys.Lett. B763 (2016) 409-415.

2017:

196. *Higgs Boson Decay to Light Jets at the LHC*  
Linda M. Carpenter, Tao Han, Khalida Hendricks, Zhuoni Qian, Ning Zhou,  
Phys. Rev. D95 (2017) no.5, 053003.

197. *Unblinding the dark matter blind spots*  
Tao Han, Felix Kling, Shufang Su, Yongcheng Wu, JHEP 1702 (2017) 057.

198. *Measuring the CP property of Higgs coupling to tau leptons in the VBF channel at the LHC*  
Tao Han, Satya Mukhopadhyay, Biswarup Mukhopadhyaya, Yongcheng Wu, JHEP 1705 (2017) 128.

199. *Electroweak Splitting Functions and High Energy Showering*  
Junmou Chen, Tao Han, Brock Tweedie, JHEP 1711 (2017) 093.

200. *Physics at a 100 TeV pp collider: beyond the Standard Model phenomena*  
T. Golling (U. Geneva) et al.. Submitted to: Phys. Rept.. e-Print: arXiv:1606.00947.

201. *Physics at a 100 TeV pp collider: Standard Model processes*  
M.L. Mangano (CERN) et al.. Submitted to: Phys. Rept.. e-Print: arXiv:1607.01831.

202. *Radiative Decays of the Higgs Boson to a Pair of Fermions*  
Tao Han and Xing Wang, JHEP 1710 (2017) 036.

2018:

203. *Thermal Dark Matter Through the Dirac Neutrino Portal*  
Brian Batell, Tao Han, David McKeen, Barmak Shams Es Haghi,  
Phys. Rev. D97 (2018) no.7, 075016.

204. *Off-shell Higgs Probe to Naturalness*  
David Goncalves, Tao Han, Satya Mukhopadhyay,  
Phys. Rev. Lett. 120 (2018) no.11, 111801.

205. *Indirect Detection of Neutrino Portal Dark Matter*  
Brian Batell, Tao Han, Barmak Shams Es Haghi,  
Phys.Rev. D97 (2018) no.9, 095020.

206. *Lepton Number Violation: Seesaw Models and Their Collider Tests*  
Yi Cai, Tao Han, Tong Li, Richard Ruiz, Front.in Phys. 6 (2018) 40.

207. *Higgs Pair Production at Future Hadron Colliders: From Kinematics to Dynamics*  
Dorival Goncalves, Tao Han, Felix Kling, Tilman Plehn, Michihisa Takeuchi,  
Phys. Rev. D97 (2018) no.11, 113004.

208. *Higgs Couplings at High Scales*  
Dorival Goncalves, Tao Han, Satyanarayan Mukhopadhyay,  
Phys. Rev. D98 (2018) no.1, 015023.

209. *Electroweak Dark Matter at Future Hadron Colliders*  
Tao Han, Satyanarayan Mukhopadhyay, Xing Wang,  
Phys. Rev. D98 (2018) no.3, 035026.
- 2019:
210. *Type-II 2HDM under the Precision Measurements at the Z-pole and a Higgs Factory*  
Ning Chen, Tao Han, Shufang Su, Wei Su, Yongcheng Wu, JHEP 1903 (2019) 023.
211. *Dark Matter Blind Spots at One-Loop*  
Tao Han, Hongkai Liu, Satyanarayan Mukhopadhyay, Xing Wang,  
JHEP 1903 (2019) 080.
212. *Charm-quark Yukawa Coupling in  $h \rightarrow c\bar{c}\gamma$  at LHC*  
Tao Han, Benjamin Nachman, Xing Wang, Phys. Lett. B793 (2019) 90-96.
213. *Precision Higgs Physics at CEPC*  
Fenfeng An *et al*, Chin. Phys. C43 (2019) no.4, 043002.
214. *SUSY Signals from QCD Production at the Upgraded LHC*  
Tao Han, Ahmed Ismail, Barmak Shams Es Haghi, Phys. Lett. B793 (2019) 354-359.
215. *New physics implication of Higgs precision measurements*  
Ning Chen, Jiayin Gu, Tao Han, Honglei Li, Zhen Liu, Huayang Song, Shufang Su,  
Wei Su, Yongcheng Wu, Jin Min Yang,  
Int. J. Mod. Phys. A34 (2019) no.13n14, 1940012.
216. *Nonstandard neutrino interactions at COHERENT, DUNE, T2HK and LHC*  
Tao Han, Jiajun Liao, Hongkai Liu, Danny Marfatia, JHEP 1911 (2019) 028.
- 2020:
217. *Leptonic Scalars at the LHC*  
André de Gouvêa, Bhupal Dev, Bhaskar Dutta, Tathagata Ghosh, Tao Han, Yongchao  
Zhang, JHEP 07 (2020) 142.
218. *Type-I 2HDM under the Higgs and Electroweak Precision Measurements*  
Ning Chen, Tao Han, Shuailong Li, Shufang Su, Wei Su, Yongcheng Wu,  
JHEP 08 (2020) 131.
219. *The Search for Electroweakinos*  
Anadi Canepa, Tao Han, Xing Wang,  
Annual Review of Nuclear and Particle Science, Vol. 70 (2020), p. 425-454.
220. *Scalar and tensor neutrino interactions*  
Tao Han, Jiajun Liao, Hongkai Liu, Danny Marfatia, JHEP 07 (2020) 207.
- 2021:
221. *High Energy Leptonic Collisions and Electroweak Parton Distribution Functions*  
Tao Han, Yang Ma, Keping Xie, e-Print: 2007.14300.
222. *Comparative Studies of 2HDMs under the Higgs Boson Precision Measurements*  
Tao Han, Shuailong Li, Shufang Su, Wei Su, Yongcheng Wu, e-Print: 2008.05492.

223. *Electroweak Couplings of the Higgs Boson at a Multi-TeV Muon Collider*  
Tao Han, Da Liu, Ian Low, Xing Wang, e-Print: 2008.12204.
224. *WIMPs at High Energy Muon Colliders*  
Tao Han, Zhen Liu, Lian-Tao Wang, Xing Wang, e-Print: 2009.11287.
225. *Off-shell Higgs Couplings in  $H^* \rightarrow ZZ \rightarrow \ell\bar{\ell}\nu\bar{\nu}$*   
Dorival Goncalves, Tao Han, Sze Ching Iris Leung, Han Qin, e-Print: 2012.05272.
226. *Electroweak Phase Transition with an  $SU(2)$  Dark Sector*  
Tathagata Ghosh, Huai-Ke Guo, Tao Han, Hongkai Liu, e-Print: 2012.09758.

## (2). Other Publications & Contributions to Conference Proceedings

1987:

1. *Probing the Higgs Sector at the SSC: the Standard Model and Beyond*  
J. F. Gunion *et al.*, in the Proceedings of the Workshop, *From Colliders to Super-colliders*, Madison, Wisconsin, May 1987, p. 67, and Int. J. Mod. Phys. **A2** (1987) 957.

1988:

2. *Higgs  $\rightarrow$  Four Leptons at the SSC*  
E. M. Wang and G. G. Hanson *et al.*, p. 109 in the Proceedings of the Snowmass Workshop, *1988 Summer Study on High Energy Physics in the 1990's*, June 27-July 15, 1988.

1989:

3. *Report of the Electroweak Interactions Theoretical Issues Working Group*  
M. Golden *et al.*, p. 112 in the Proceedings of the Workshop, *Physics at Fermilab in the 1990's*, Breckenridge, CO., Aug. 15-24, 1989.
4. *Summary Report of the QCD Collider Group*  
H. Weerts *et al.*, p. 212 in the Proceedings of the Workshop, *Physics at Fermilab in the 1990's*, Breckenridge, CO., Aug. 15-24, 1989.

1990:

5. *Overview and Progress in Higgs Boson Physics at the SSC*  
J. F. Gunion *et al.*, p. 59 in the Proceedings of the Snowmass Workshop, *1990 Summer Study on High Energy Physics*.
6. *Techni-rho Production at the SSC*  
J. Bagger, T. Han and R. Rosenfeld, p. 208 in the Proceedings of the Snowmass Workshop, *1990 Summer Study on High Energy Physics*.
7.  *$HZ \rightarrow \gamma\gamma l^+l^-$ : A Possibility for An Extremely High Luminosity Collider*  
A. Grau, T. Han and G. Pancheri, p. 488 in the Proceedings of the LHC Workshop, Aachen, Germany, Oct. 4-9, 1990.

1992:

8. *Meson Mass Differences for Heavy-Light Systems*  
E. Eichten and T. Han, p. 655 in the Proceedings of the Annual Meeting of DPF, Fermilab, Nov. 1992.
- 1993:
9. *Strongly-Interacting Electroweak Sector at Future Colliders*  
T. Han, p. 270 in the Proceedings of the 2<sup>nd</sup> International Workshop on Physics and Experiments at  $e^+e^-$  Next Linear Colliders, Waikoloa, Hawaii, April 26-30, 1993.
- 1994:
10. *Higgs Boson Physics at an Upgraded Tevatron*  
T. Han, p. 483 in Proceedings of APS DPF 1994, Univ. of New Mexico, Albuquerque, NM, Aug. 1-7, 1994.
11. *Physics Goals of  $\mu^+\mu^-$  Colliders*  
V. Barger *et al.*, p. 55 in Proceedings of The 2nd Workshop on Physics Potential and Development of  $\mu^+\mu^-$  Colliders, Sausalito, CA, Nov. 17-19, 1994.
- 1995:
12. *Anomalous Gauge Boson Interactions*  
H. Aihara *et al.*, in the DPF Long-Range Planning Study, in *Electroweak Symmetry Breaking and Beyond the Standard Model*, eds. T. Barklow, S. Dawson, H. Haber, and J. Seigris.
13. *Exact and Approximate Radiation Amplitude Zeros — Phenomenological Aspects*  
T. Han in Proceedings of International Symposium on Vector Boson Self-Interactions, UCLA, California, February 1-3, 1995.
14. *Higgs Boson and  $W_L W_L$  Scattering at  $e^-e^-$  Colliders*  
T. Han, p. 1541 in Proceedings of Santa Cruz  $e^-e^-$  Workshop, Santa Cruz, California, Sept. 4-5, 1995.
15. *Particle Physics Opportunities at  $\mu^+\mu^-$  Colliders*  
V. Barger *et al.*, in Proceedings of 3<sup>rd</sup> International Conference on Physics Potential and Development of  $\mu^+\mu^-$  Colliders, San Francisco, California, Dec. 13-16, 1995.
- 1996:
16. *Strongly Interacting Electroweak Sector: Model Independent Approaches*  
M. Golden, T. Han and G. Valencia, in the book *Particle Physics: Perspectives and Opportunities*, ed. by R. Peccei *et al.*, World Scientific, p. 170 (1996).
17. *Intermediate Vector Boson Physics*  
H. Aihara *et al.*, in the Report of TeV-2000 Study Group, *Future Electroweak Physics at the Fermilab Tevatron*, ed. by D. Amidei and R. Brock (April 1, 1996).
18. *Physics and Technology of the Next Linear Collider*  
A Report submitted to Snowmass '96, by the NLC ZDR Design Group and the NLC Physics Working Group (June, 1996).



19.  *$\mu^+\mu^-$  Collider: A Feasibility Study*  
the  $\mu^+\mu^-$  Collider Collaboration (July, 1996).
  20. *Weakly Coupled Higgs Bosons and Precision Electroweak Physics*  
Howard E. Haber, Tao Han, Frank S. Merritt, John Womersley, in the proceedings of 1996 DPF/DPB Summer Study on *New Directions for High-energy Physics* (Snowmass 96), Snowmass, CO, (25 June - 12 July 1996), p. 482.
  21. *Precision Electroweak Physics at Future Collider Experiments*  
U. Baur and M. Demarteau *et al.*, in the proceedings of 1996 DPF/DPB Summer Study on *New Directions for High-energy Physics* (Snowmass 96), Snowmass, CO, (25 June - 12 July 1996), p. 499.
  22. *Implications of  $\mu\nu_\mu\gamma\gamma$  Production on Precision Measurements of the  $W^\pm$  Mass*  
U. Baur, T. Han, R. Sobey and D. Zeppenfeld, in the proceedings of 1996 DPF/DPB Summer Study on *New Directions for High-Energy Physics* (Snowmass 96), Snowmass, CO, (25 June - 12 July 1996), p. 514.
  23. *Higgs Boson Discovery and Properties*  
J.F. Gunion *et al.*, in the proceedings of 1996 DPF/DPB Summer Study on *New Directions for High-Energy Physics* (Snowmass 96), Snowmass, CO, (25 June - 12 July 1996), p. 541.
  24. *Top Quark Physics: Future Measurements*  
R. Frey *et al.*, in the proceedings of 1996 DPF/DPB Summer Study on *New Directions for High-Energy Physics* (Snowmass 96), Snowmass, CO, (25 June - 12 July 1996), p. 760.
  25. *Anomalous Gauge Boson Couplings*  
S. Errede and K. Riles *et al.*, in the proceedings of 1996 DPF/DPB Summer Study on *New Directions for High-energy Physics* (Snowmass 96), Snowmass, CO, (25 June - 12 July 1996), p. 802.
- 1997:
26. *Strong WW Scattering Physics: a Comparative Study for the LHC, NLC and a Muon Collider*  
Tao Han, in the Proceedings of the Ringberg Workshop: *The Higgs Puzzle - What can We Learn from LEP2, LHC, NLC, and FMC?*, Ringberg, Germany, (8-13 Dec 1996), p. 197.
  27. *The Physics Capability of  $\mu^+\mu^-$  Colliders*  
Muon Quartet Collaboration (V. Barger *et al.*, in the Proceedings of the ITP Conference on *Future High-Energy Colliders*, Santa Barbara, CA, (21-25 Oct 1996), hep-ph/9704290.
  28. *Summery of the Very Large Hadron Collider Physics and Detector Workshop*  
G. Anderson *et al.*, in the *Very Large Hadron Collider Physics and Detector Workshop: Beyond the LHC*, Batavia, IL, (13-15 Mar 1997), hep-ph/9710254

1998:

29. *Higgs Boson and Z Physics at the First Muon Collider*  
 Marcel Demarteau and Tao Han, in the proceedings of Workshop on *Physics at the First Muon Collider and at the Front End of the Muon Collider*, Fermilab, Batavia, IL, (6-9 Nov 1997), hep-ph/9801407.
30. *Discovery Limits for Techniomega Production in  $e\gamma$  Collisions*  
 Stephen Godfrey, Tao Han and Pat Kalyniak, published in the proceedings of *29th International Conference on High-Energy Physics (ICHEP 98)*, Vancouver, Canada, 23-29 July 1998.
- 1999:
31. *Strong Interactions of Weak Bosons*  
 Tao Han, published in the proceedings of *the 4<sup>th</sup> Workshop on Linear Collider Physics*, Sitges, Barcelona, Spain, (April 28-May 5, 1999).
32. *Expression of Interest for R&D Towards a Neutrino Factory Based on a Storage Ring and a Muon Collider*  
 D. Ayres et al., the Neutrino Factory and Muon Collider Collaboration, e-Print Archive: physics/9911009.
- 2000:
33. *Report of the SUGRA Working Group for Run II of the Tevatron*  
 S. Abel et al., hep-ph/0003154.
34. *A Feasibility Study of a Neutrino Source Based on a Muon Storage Ring*  
 N. Holtkamp et al., the Neutrino Factory and Muon Collider Collaboration, FERMILAB-PUB-00-108-E.
35. *Report of the Tevatron Higgs Working Group*  
 M. Carena et al., hep-ph/0010338.
- 2001:
36. *Linear Collider Resource Book for Snowmass 2001*  
 American Linear Collider Working Group (T. Abe et al.), Part 1, Introduction: hep-ex/0106055; Part 2: Higgs and Supersymmetry: hep-ex/0106056; Part 3: Exotic and Standard Model Physics: hep-ex/0106057; Part 4: Theoretical, Accelerator, and Experimental options: hep-ex/0106058.
37. *TESLA Technical Design Report*  
 Part 3: Physics at an  $e^+e^-$  Linear Collider, ECFA/DESY LC Physics Working Group (J.A. Aguilar-Saavedra et al.), hep-ph/0106315.
38. *Particle Physics Experiments at JLC*  
 ACFA Linear Collider Working Group (Koh Abe et al.), hep-ph/0109166.
39. *Physics of Higgs Factories*  
 V. Barger, M. Berger, J. Gunion and T. Han, hep-ph/0110340.
40. *E1 Working Group Summary: Neutrino Factories and Muon Colliders*  
 hep-ph/0111030, in Snowmass 2001 Proceedings.

41. *Determination of  $\tan\beta$  at a Linear Collider*  
J. Gunion, T. Han, J. Jiang, S. Mrenna and A. Sopczac, hep-ph/0112334, in Snowmass 2001 Proceedings.

2002:

42. *Physics at Future Hadron Colliders*  
U. Baur *et al.*, hep-ph/0201227, in Snowmass 2001 Proceedings.
43. *P1-4, P3-4 Working Group Summary: Electroweak Symmetry Breaking by Strong Dynamics and the Collider Phenomenology*  
T.L. Barklow, R.S. Chivukula, J. Goldstein, T. Han, hep-ph/0201243, in Snowmass 2001 Proceedings.
44. *Feasibility Study II of a Muon-Based Neutrino Source*  
S. Ozaki *et al.*, BNL-52623.
45. *Top anomalous Decays in R-Parity Violating SUSY*  
G. Eilam, A. Gemintern, T. Han, J.M. Yang, and X. Zhang, published in *Budapest 2001, High energy physics*, hep2001/161.
46. *Status of Neutrino Factory and Muon Collider Research and Development and Future Plans*  
Muon Collider/Neutrino Factory Collaboration (Mohammad M. Alsharoa *et al.*), FERMILAB-PUB-02-149-E, Jul 2002. 103pp. Submitted to PRSTA, hep-ex/0207031.
47. *Overview of  $\tan\beta$  determination at a Linear  $e^+e^-$  Collider*  
J. Gunion, T. Han, J. Jiang, and A. Sopczak, in *the proceedings of 10th International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY02)*, Hamburg, Germany, 17-23 Jun 2002, hep-ph/0211123.

2003:

48.  *$\tau - \mu$  Flavor Violation and the Scale of New Physics*  
Deirdre Black, Tao Han, Hong-Jian He, and Marc Sher, in the *Proceedings Conf. on Interface of Particle Astrophysics and Nuclear Physics - 2003*, e-Print Archive: hep-ph/0307182.
49. *Little Higgs Phenomenology*  
in the *Proceedings Conf. on Interface of Particle Astrophysics and Nuclear Physics - 2003*.
50. *Little Higgs Models and Quark Flavors*  
in the *Proceedings of International Conf. on Flavor Physics - 2003*.

2004:

51. *An NMSSM Model Without Doman Walls*  
Tao Han, Paul Langacker, Bob McElrath, in the *Proceedings of SUSY-03*, e-Print Archive: hep-ph/0402064.
52. *Smoking Gun Signatures for Little Higgs Models*  
in the *Proceedings of SUSY-03*, Tsukuba, Japan (2004).

53. *Physics Interplay of the LHC and the ILC*  
e-Print Archive: hep-ph/0410364.
54. *New Signatures for Top in Hadron Colliders*  
T. Han, G. Valencia, and Y. Wang, e-Print Archive: hep-ph/0411055.
55. *Physics at the CLIC Multi-TeV Linear Collider*,  
CLIC Physics Working Group et al.. CERN-2004-005, e-Print Archive: hep-ph/0412251.
- 2005:
56. *Collider Phenomenology: Basic Knowledge and Techniques*  
Lectures given at Theoretical Advance Study Institute in Elementary Particle Physics (TASI 2004): Physics in  $D \geq 4$ , Boulder, Colorado, 6 Jun - 2 Jul 2004. e-Print Archive: hep-ph/0508097.
57. *Extended Joint ECFA/DESY Study on Physics and Detector for a Linear  $e^+e^-$  Collider*  
K. Ackermann et al.. DESY-PROC-2004-01, DESY-04-123, DESY-04-123G, Mar 2004, for the 4<sup>th</sup> ECFA/DESY Workshop on Physics and Detectors for a 90-GeV to 800-GeV Linear  $e^+e^-$  Collider, Amsterdam, The Netherlands, 1-4 Apr 2003.
58. *Toward high precision Higgs-boson measurements at the International Linear  $e^+e^-$  Collider*  
S. Heinemeyer et al.. FERMILAB-CONF-05-541-T, presented at 2005 International Linear Collider Physics and Detector Workshop and 2<sup>nd</sup> ILC Accelerator Workshop, Snowmass, Colorado, 14-27 Aug 2005, e-Print Archive: hep-ph/0511332.
59. *Supersymmetry parameter analysis: SPA convention and project*  
J.A. Aguilar-Saavedra et al.. SLAC-PUB-11579, Submitted to Eur.Phys.C, e-Print Archive: hep-ph/0511344.
- 2006:
60. *Searching for  $T'$  in the Little Higgs Model Using Jet Based Information at CMS*  
US-CMS Collaboration. FERMILAB-FN-0786-E, April 2006.
61. *Workshop on CP Studies and Non-Standard Higgs Physics*  
E. Accomando et al. CERN-2006-009, Jul 2006. 542pp. Contributed to Meeting on CP Violation and Non-standard Higgs Physics, 2-3 Dec 2004, hep-ph/0608079.
62. *Tevatron for LHC report: Higgs*  
U. Aglietti et al., FERMILAB-CONF-06-467-E-T, Dec 2006. 138pp. e-Print: hep-ph/0612172.
- 2007:
63. *ILC Reference Design Report: ILC Global Design Effort and World Wide Study*  
ILC Collaboration (James Brau, (Ed.) et al.). FERMILAB-APC, Aug 2007. 147pp. e-Print: arXiv:0712.1950 [physics.acc-ph].
64. *ILC Reference Design Report Volume 4 - Detectors*  
ILC Collaboration (Ties Behnke, (Ed.) et al.). FERMILAB-APC, Dec 2007. e-Print: arXiv:0712.2356 [physics.ins-det].

65. *International Linear Collider Reference Design Report Volume 2: PHYSICS AT THE ILC*  
By ILC (Gerald Aarons et al.). Sep 2007, e-Print: arXiv:0709.1893 [hep-ph].
- 2008:
66. *The “Top Priority” at the LHC*  
Tao Han, Apr 2008. 25pp. Contributed chapter to the book of “Perspectives on the LHC”, edited by G. Kane and A. Pierce.
67. *Searching for 100 and 200 GeV Majorana Neutrinos at the LHC Using Like Sign Dilepton Final State*  
W. Clarida, T. Yetkin, S. Mrenna, R. Vidal, W. Wu, Tao Han, H. Pi, E. Yazgan, CMS Note 2008/054.
- 2009:
68. *From the LHC to Future Colliders*  
A. De Roeck et al., Eur.Phys.J.C66:525-583,2010.
- 2010:
69. *The Hunt for New Physics at the Large Hadron Collider*  
P. Nath et al. Jan 2010. 234pp, Summary document Pre-SUSY 2009: Beyond the Standard Model Physics and LHC Signatures (BSM-LHC), Boston, Massachusetts, 2-4 Jun 2009. Nucl.Phys.Proc.Suppl. 200-202 (2010) 185-417.
- 2011:
70. *Simplified Models for LHC New Physics Searches*  
Daniele Alves et al., May 2011, e-Print: arXiv:1105.2838 [hep-ph].
- 2012:
71. *Fundamental Physics at the Intensity Frontier*  
J. Hewett and H. Weets, et al., May 2012, e-Print: arXiv:1205.2671 [hep-ex].
72. *A Large Hadron Electron Collider at CERN: Report on the Physics and Design Concepts for Machine and Detector*  
LHeC Study Group Collaboration (J.L. Abelleira Fernandez et al.), June 2012, e-Print: arXiv:1206.2913.
73. *. A Large Hadron Electron Collider at CERN*  
J.L. Abelleira Fernandez et al., Conference: C12-09-10.3 Proceedings: e-Print: arXiv:1211.4831.
74. *On the Relation of the LHeC and the LHC*  
LHeC Study Group Collaboration (J.L. Abelleira Fernandez et al.), e-Print: arXiv:1211.5102.
- 2013:
75. *The Case for a Muon Collider Higgs Factory*  
Yuri Alexahin et al., e-Print: arXiv:1307.6129.
76. *Muon Collider Higgs Factory for Snowmass 2013*  
Yuri Alexahin et al., e-Print: arXiv:1308.2143 .

77. *Diagnosis of a New Neutral Gauge Boson at the LHC and ILC for Snowmass 2013*  
Tao Han, Paul Langacker, Zhen Liu, Lian-Tao Wang, e-Print: arXiv:1308.2738.
78. *Electroweakino Searches: A Comparative Study for LHC and ILC (A Snowmass White Paper)*  
Mikael Berggren, Tao Han, Jenny List, Sanjay Padhi, Shufang Su, Tomohiko Tanabe, e-Print: arXiv:1309.7342.
79. *Working Group Report: Higgs Boson*  
Sally Dawson et al., e-Print: arXiv:1310.8361.
80. *Working Group Report: New Particles, Forces, and Dimensions*  
Yuri Gershtein et al., e-Print: arXiv:1311.0299.
81. *Working Group Report: Top Quark*  
Top Quark Working Group Collaboration (K. Agashe (Convener) et al.), e-Print: arXiv:1311.2028.
- 2014:
82. *Assessment of workforce development needs in Office of Science research disciplines*  
HEPAP Subcommittee Collaboration (Ilan Ben-Zvi et al.), 2014.
- 2015:
83. *Concept for a Future Super Proton-Proton Collider*  
Jingyu Tang et al., 2015, e-Print: arXiv:1507.03224.
- 2016:
84. *ASCR/HEP Exascale Requirements Review Report*  
Salman Habib (LBNL, Berkeley) et al.. e-Print: arXiv:1603.09303.
85. *Physics at a 100 TeV pp Collider: Standard Model Processes*  
M.L. Mangano (CERN) et al.. 257 pp. CERN Yellow Report (2017) no.3, 1-254, e-Print: arXiv:1607.01831.
86. *Physics at a 100 TeV pp collider: beyond the Standard Model phenomena*  
T. Golling (U. Geneva (main)) et al.. 197 pp. CERN Yellow Report (2017) no.3, 441-634, e-Print: arXiv:1606.00947.
87. *Handbook of LHC Higgs Cross Sections: 4. Deciphering the Nature of the Higgs Sector*  
LHC Higgs Cross Section Working Group (D. de Florian (ITeDA, Buenos Aires) et al.). 868 pp. e-Print: arXiv:1610.07922.
- 2018:
88. *New physics implication of Higgs precision measurements*  
Ning Chen, Jiayin Gu, Tao Han, Honglei Li, Zhen Liu, Huayang Song, Shufang Su, Wei Su, Yongcheng Wu, Jin Min Yang. Conference: C18-01-08.4, e-Print: arXiv:1808.10177.
89. *Opportunities in Flavour Physics at the HL-LHC and HE-LHC*  
A. Cerri (Sussex U.) et al., CERN-LPCC-2018-06 e-Print: arXiv:1812.07638.

90. *Beyond the Standard Model Physics at the HL-LHC and HE-LHC*  
Working Group 3 (Xabier Cid Vidal et al.), e-Print: arXiv:1812.07831.

2019:

91. *Implication of Higgs Precision Measurement on New Physics*  
Ning Chen (Nankai U.), Tao Han (Pittsburgh U.), Shufang Su (Arizona U.), Wei Su, Yongcheng Wu, e-Print: arXiv:1901.09067.
92. *Higgs Physics at the HL-LHC and HE-LHC*  
Physics of the HL-LHC Working Group (M. Cepeda et al.), e-Print: arXiv:1902.00134.
93. *Neutrino Non-Standard Interactions: A Status Report*  
Bhupal Dev et al., SciPost Phys. Proc. 2 (2019) 001.
94. *Higgs Boson Decay to Light Jets at the LHC*  
Zhuoni Qian, Linda M. Carpenter, Tao Han, Khalida Hendricks, Ning Zhou, PoS ICHEP2018 (2019) 052.

### (3). Books

1. *Beyond the Standard Model IV, Conference Proceedings.*  
Editors: J. F. Gunion, T. Han and J. Ohnemus, World Scientific Publishing Co., 1995.
2. *The Dawn of the LHC Era: TASI 2008*  
Proceedings of the 2008 Theoretical Advanced Study Institute in Elementary Particle Physics.  
Editor: Tao Han, World Scientific Publishing Co., 2010.
3. *Very Heavy Quarks at the LHC*  
Special volume for *Advances in High Energy Physics*  
Editors: Johan Alwall, Kai-Feng Chen, Tao Han, George W.-S. Hou, Hindawi Publishing Co., 2013.

### (4). Invited Talks in Conferences

1989:

1. *Some New Aspects of SUSY R-Parity Violating Interactions*  
plenary talk at the *Collider Phenomenology Conference*, Argonne National Laboratory, June, 1989.

1991:

2. *Searching for Strong Weak-Boson Scattering Signals at the SSC: A Brief Overview*  
plenary talk at the *SSC Physics Symposium*, UW-Madison, Wisconsin, Feb. 25–27, 1991.

1992:

3. *Test of the Dimopoulos-Hall-Raby Ansatz for Fermion Mass Matrices*  
parallel talk at the *SSC Physics Symposium*, UW-Madison, Wisconsin, April 13–15, 1992.
4. *Transverse Momentum Distribution of Z-Boson Pairs at Hadron Supercolliders*  
parallel talk at the *SSC Physics Symposium*, UW-Madison, Wisconsin, April 13–15, 1992.
5. *Electromagnetic Mass Differences for Heavy-Light Mesons*  
parallel talk at the *APS/DPF 1992 Annual Meeting*, Fermilab, Illinois, Nov. 13, 1992.
6. *Strategies for Study of  $W_L W_L \rightarrow W_L W_L$  Scattering at SSC/LHC*  
plenary talk at the *Electroweak Symmetry Breaking at Collider-Beam Facilities*, Santa Cruz, California, Dec. 11–12, 1992.

1993:

7. *Forward Jet-tagging at Hadron Supercolliders*  
plenary talk at the *SSC Physics Symposium*, UW-Madison, Wisconsin, March 29–31, 1993.
8. *Strongly-Interacting Electroweak Sector at Future Colliders*  
plenary talk at the *2<sup>nd</sup> International Workshop on Physics and Experiments at  $e^+e^-$  Next Linear Colliders*, Waikoloa, Hawaii, April 26-30, 1993.

1994:

9. *Strongly-interacting Electroweak Sector*  
plenary talk at the *Workshop on Electroweak Symmetry Breaking and TeV-Scale Physics*, UC-Santa Barbara, California, February 25, 1994.
10. *Search for Anomalous Couplings at  $e\gamma$  Colliders*  
parallel talk at the *Workshop on Gamma-Gamma Colliders*, Lawrence Berkeley Laboratory, California, March 28-31, 1994.
11. *Amplitude Zeros in  $W^\pm Z$  Production*, parallel talk at the *Physics Doesn't Stop: Recent Developments in Phenomenology*, UW-Madison, Wisconsin, April 11-13, 1994.
12. *Higgs Boson Physics at the 4 TeV Upgraded Tevatron*, parallel talk at the *Physics Doesn't Stop: Recent Developments in Phenomenology*, UW-Madison, Wisconsin, April 11-13, 1994.
13. *Higgs Boson Physics at an Upgraded Tevatron*, parallel talk at the *DPF 1994 Meeting*, Univ. of New Mexico, Albuquerque, NM, Aug. 1-7, 1994.

1995:

14. *Exact and Approximate Radiation Amplitude Zeros — Phenomenological Aspects*  
plenary talk at the *International Symposium on Vector Boson Self-Interactions*, UCLA, California, February 1-3, 1995.



15. *Strongly-Interacting Electroweak Sector at the LHC*  
plenary talk at the *Topics in Particle Physics with CMS*, UCLA, California, February 6-8, 1995.
  16. *Top Quark Decay via FCNC at Hadron Colliders*  
plenary talk at the *Workshop on Particle Theory And Phenomenology*, Iowa State University, Ames, Iowa, May 25-26, 1995.
  17. *Strong  $W_L W_L$  Scattering Signals at the NLC*  
plenary talk at the *Study Group Meeting on Future  $e^+e^-$  Collider physics*, Estes Park, Colorado, June 21-23, 1995.
  18. *Physics Potential at  $\mu^+\mu^-$  Colliders*  
parallel talk at the *1<sup>st</sup> Joint Meeting of the Chinese Physical Societies*, Shantou University, Guangdong, China, Aug. 4-9, 1995.
  19. *Strong  $W_L W_L$  Scattering Signals at the LHC*  
parallel talk at the *CMS Week*, Granlibakken, Lake Tahoe, California, Sept. 25-29, 1995.
  20. *Higgs Physics at  $e^-e^-$  Colliders*  
parallel talk at the *Physics with High Energy  $e^+e^-$  Colliders*, Fermilab, Batavia, Illinois, Nov. 16-18, 1995.
  21. *Low-lying States in a Strongly Interacting E.W. Sector*  
parallel talk at the *Physics with High Energy  $e^+e^-$  Colliders*, Fermilab, Batavia, Illinois, Nov. 16-18, 1995.
  22. *Summary for Strongly Interacting E.W. Sector Working Group*  
plenary talk at the *Physics with High Energy  $e^+e^-$  Colliders*, Fermilab, Batavia, Illinois, Nov. 16-18, 1995.
  23. *Physics Potential at a  $2 \times 2$  TeV  $\mu^+\mu^-$  Collider*  
plenary talk at the *3<sup>rd</sup> International Conference on Physics Potential and Development of  $\mu^+\mu^-$  Colliders*, San Francisco, California, Dec. 13-16, 1995.
- 1996:
24. *Higgs Physics at  $e^-e^-$  Colliders*  
parallel talk at the *Physics with High Energy  $e^+e^-$  Colliders*, SLAC, California, Feb. 29 - Mar.2, 1996.
  25. *Jet-Angular distributions from  $W_L W_L$  Decays at a TeV NLC*  
parallel talk at the *Physics with High Energy  $e^+e^-$  Colliders*, SLAC, California, Feb. 29 - Mar.2, 1996.
  26. *Top-Quark Decay via FCNC at the LHC*  
plenary talk at the *High Energy Physics at the LHC*, Fermilab, Batavia, Illinois, March 28-30, 1996.
  27. *Strong  $W_L W_L$  Scattering Signals at Future Colliders*  
plenary talk at the *Pheno 96 Symposium: Recent Developments in Phenomenology*, Madison, Wisconsin, April 1-3, 1996.

28. *Search for anomalous  $tcZ, tc\gamma$  Couplings at the NLC*  
 “Strong Coupling Working Group” plenary talk at the *New Directions for High Energy Physics*, Snowmass, Colorado, June 25 - July 12, 1996.
29. *Strong  $W_L W_L$  Scattering Signals at a 4 TeV  $\mu^+ \mu^-$  Collider*  
 “Strong Coupling Working Group” plenary talk at the *New Directions for High Energy Physics*, Snowmass, Colorado, June 25 - July 12, 1996.
30. *Strongly Interacting Electroweak Sector: A Comparative Study at the LHC, NLC and Muon Colliders*  
 plenary talk at the Ringberg Workshop, *the Higgs Puzzle*, Ringberg Castle, Munich, Germany, Dec. 8-13, 1996.

1997:

31. *From Top to Charm via Flavor Changing Neutral Currents*  
 plenary talk at the FCNC Workshop, *Flavor Changing Neutral currents '97*, Santa Monica, California, Feb. 19-21, 1997.
32. *Measuring the Higgs Boson to ZZ Coupling at Linear Colliders*  
 parallel talk at the *Beyond the Standard Model V*, Balholm, Norway, April 29 - May 4, 1997.
33. *Strong WW Scattering Physics at  $e^- e^-$  Colliders*  
 plenary talk at the *Workshop for Physics at  $e^- e^-$  Colliders*, University of California, Santa Cruz, Sept. 23, 1997.
34. *Some Aspects of the Electroweak Symmetry Breaking*  
 plenary talk at the conference on *Pacific Particle Physics Phenomenology*, Seoul, Korea, Oct. 31 - Nov. 2, 1997.
35. *Higgs Boson Physics at the NLC*  
 parallel talk at the *Physics at the First Muon Collider and at the Front End of the Muon Collider*, Fermilab, Batavia, IL, Nov. 6-9, 1997.
36. *Z-pole Physics with High Luminosity and Polarized Beams*  
 parallel talk at the *Physics at the First Muon Collider and at the Front End of the Muon Collider*, Fermilab, Batavia, IL, Nov. 6-9, 1997.
37. *Higgs Bosons and Z-pole Physics at the FMC*  
 plenary talk as the working group summary at the *Physics at the First Muon Collider and at the Front End of the Muon Collider*, Fermilab, Batavia, IL, Nov. 6-9, 1997.
38. *Strongly Interacting Electroweak Sector: a Comparative Study at LHC, NLC and a Muon Collider*  
 plenary talk at the *4th International Conference on Physics Potential and Development of  $\mu^+ \mu^-$  Colliders*, San Francisco, CA, Dec. 10-12, 1997.
39. *Z-pole Physics with High Luminosity and Polarized Beams*  
 plenary talk at the *4th International Conference on Physics Potential and Development of  $\mu^+ \mu^-$  Colliders*, San Francisco, CA, Dec. 10-12, 1997.

1998:

40. *Mass Spectrum of SUSY Particles with Direct Messenger-Matter Interactions*  
parallel talk at Supersymmetry/Higgs Working Group meeting for *Physics at the Tevatron Run II Workshop*, Fermilab, Batavia, IL, March 20-22, 1998.
42. *Light Higgs Boson in a Non-standard Electroweak Sector at Colliders*  
talk given at *Aspen Summer Institute*, Aspen, CO, July 8, 1998.
43. *Some Aspects in Gauge-Mediated Supersymmetry-Breaking Models*  
parallel talk at *The 29th International Conference on High-Energy Physics (ICHEP 98)*, Vancouver, Canada, 23-29 July 1998.
44. *Top Story with New Interactions: FCNC at the NLC*  
parallel talk at *Workshop on Physics and Detectors for Future  $e^+e^-$  Linear Colliders*, Keystone, CO, Sept. 26-29, 1998.
45. *Strong WW Scattering Physics at an  $e^-e^-$  Collider*  
parallel talk at *Workshop on Physics and Detectors for Future  $e^+e^-$  Linear Colliders*, Keystone, CO, Sept. 26-29, 1998.
46. *Introduction: Top Quark Rare Decays*  
plenary talk at *Thinkshop: Top-quark Physics at Tevatron Run-II*, Fermilab, IL, October 16-18, 1998.

1999:

47. *Physics Expectations at Future Colliders*  
plenary talk at *1999 Aspen Winter Conference on Particle Physics*, Aspen, CO, Jan. 17-23, 1999.
48. *Strong Interactions of Weak Bosons*  
plenary talk at *the 4<sup>th</sup> Workshop on Linear Collider Physics*, Sitges, Barcelona, Spain, April 28 - May 5, 1999.
49. *Physics Expectations at the VLHC*  
plenary talk at *the 1<sup>st</sup> Annual Meeting on the Very Large Hadron Collider*, Monterey, California, June 28-30, 1999.
50. *Physics Potential at the Fermilab Tripler*  
parallel talk at *the PASCOS 99*, Granlibakken Conference Center, Tahoe city, California, Dec. 10-16, 1999.
51. *s-channel Higgs Physics at the First Muon Collider*  
plenary talk at *the 5<sup>th</sup> International Conference on Physics Potential and Development of  $\mu^+\mu^-$  Colliders*, San Francisco, California, Dec. 15-17, 1999.

2000:

52. *Physics with Large Extra Dimensions*  
plenary talk at *the XXXV Rencontres de Moriond, Electroweak and Unified Theories*, March 13-18, 2000.

53.  *$h \rightarrow \tau^+\tau^-$  at the Tevatron*  
 plenary talk at the Argonne workshop *Theory Institute for SUSY and Higgs*, April 24 - May 12, 2000.
54.  *$\tan\beta$  Determination from Heavy Higgs Production at Linear Colliders*  
 parallel talk at the workshop *SUSY2K*, June 26 - July 1, 2000, CERN, Geneva.
55. *Cosmology and Mass Hierarchy in Warped Brane Models*  
 plenary talk at the conference *Beyond4D*, July 3 - 6, 2000, ICTP, Trieste.
56. *Large Extra dimensions – Astrophysical constraints*  
 plenary talk at the conference *Identification of Dark Matter 2000*, Sept.18-22, 2000, York, England.
57. *Top-quark Rare Decays*  
 parallel talk at the conference *European Heavy Flavor Workshop*, Sept.18-22, 2000, University of Durham, England.
58.  *$W_L W_L \rightarrow t\bar{t}$  at Linear Colliders*  
 parallel talk at the conference *International Linear Collider Workshop 2000*, Oct.24-28, 2000, Fermilab.
59. *Higgs Coupling with CP-Violation at Linear Colliders*  
 parallel talk at the conference *International Linear Collider Workshop 2000*, Oct.24-28, 2000, Fermilab.
- 2001:
60. *Higgs Physics at Colliders*  
 plenary talk at the International conference *SUSY 2001*, June 11-17, 2001, Dubna, Russia.
61. *Physics Potential at the VLHC*  
 Plenary talk at the *DPF Snowmass Workshop*, June 30–July 21, 2001, Snowmass, Colorado.
- 2002:
62. *TeV string excitations via high energy neutrinos*  
 parallel talk at the *DPF Annual Conference*, May 24–28, 2002, Williamsburg, VI.
63.  *$H \rightarrow \mu^+\mu^-$  at the LHC*  
 parallel talk at *SUSY 2002*, June 17–23, 2002, DESY, Hamburg, Germany.
64. *TeV string resonances*  
 parallel talk at the *1<sup>st</sup> Conference on String Phenomenology*, July 6–11, 2002, Oxford, England.
- 2003:
65. *New Physics at the LHC and LC*  
 talk presented at the “Theorists’ Rally” at the *American Linear Collider workshop*, Jan. 9–11, 2003, Arlington, Texas.

66. *TeV String Excitation and HE Cosmic Neutrinos*  
 plenary talk presented at the *Aspen Winter Conference*, Jan. 20–24, 2003, Aspen, CO.
67. *Little Higgs Phenomenology*  
 plenary talk at *Physics at Future Colliders*, March 17–18, 2003, Kyoto, Japan.
68. *Phenomenology of Little Higgs Models*  
 parallel talk at the *Conference on Interface of Particle, Astrophysics and Nuclear Physics*, May 19–24, 2003, Manhattan, New York.
69. *Flavor Physics in the Littlest Higgs Model*  
 plenary talk at the *International Conference on Flavor Physics*, Oct. 6–11, 2003, Seoul, Korea.
70. *Theory Overview: In the Light of VLHC*  
 plenary talk at the *International Workshop on Future Hadron Colliders*, Oct. 16–18, 2003, Fermilab, Chicago.
- 2004:
71. *High Energy Physics: the Current Status*  
 plenary talk at the *Conference on Interplay of High Energy Physics, Nuclear Physics, and Cosmology*, Jan. 7-11, 2004, Harbin, P.R. China.
72. *Constraints on  $\tau - \mu$  Flavor Mixing*  
 plenary talk at the *International workshop on  $\tau$  and charm Physics*, Jan. 13-15, 2004, Beijing, P.R. China.
73. *Smoking Gun signatures for Little Higgs Models*  
 plenary talk at *SUSY2004*, June 19-23, 2004, Tsukuba, Japan.
74. *New Physics Beyond the Standard Model*  
 plenary talk at *International Conference on Frontier Physics*, July 5-9, 2004, Beijing, P.R. China.
75. *Non-Standard Higgs Searches at Hadron Colliders*  
 talk given at the *TeV4LHC Higgs working group meeting*, Dec. 14, 2004, Fermilab.
- 2005:
76. *String Resonances at Hadron Colliders*  
 parallel talk given at the *TeV4LHC*, 3-5 February, 2005, Brookhaven National Lab.
77. *Anomalous Higgs Couplings*  
 talk given at the *Higgs Working Group, Snowmass ILC Conference*, August 16, 2005.
78. *Search for Extra-dimensions at Colliders*  
 talk given at the *Landscape Working Group, Snowmass ILC Conference*, August 23, 2005.
79. *Challenges for Searching for New Physics at Hadron Colliders*  
 plenary talk at the *TeV4LHC Concluding meeting*, Oct. 20, 2005, Fermilab.

2006:

80. *High Energy Physics: The Next Two Decades*  
plenary talk at the *Shuang-Qing Forum*, Feb.22, 2006, Beijing, China.
81. *An exercise for a Tevatron Inverse Problem*  
plenary talk at the *LHC Inverse Problem Workshop*, April 12-15, Ann Arbor, Michigan.
82. *The Search for Heavy Majorana Neutrinos*  
plenary talk at the *Langacker's Fest*, May 8, 2006, University of Pennsylvania.
83. *The Search for Heavy Majorana Neutrinos*  
plenary talk at the *Argonne Collider workshop*, May 10, 2006, Argonne National Lab.
84. *Am I ready for the LHC?*  
panel presentation at *SUSY-06*, June 12-17, 2006, UC-Irvine.
85. *The International Linear Collider: Challenge and Opportunity for China*  
plenary talk at the *Fragrant Hill Conference*, Dec. 5, 2006, Beijing, China.

2007:

86. *ILC in the LHC Era*  
plenary talk at the *ACFA and ILC GDE Joint Conference*, Feb.4, 2007, IHEP, Beijing, China.
87. *The "Top Priority" at the LHC*  
plenary talk at the *Princeton Joint LHC Workshop*, March 20, 2007, Princeton University.
88. *Resonant Signals*  
plenary summary talk at the *The Early Phase of the LHC for the ILC*, April 14, 2007, Fermilab.
89. *High Energy Physics: the Next Two Decades*  
plenary talk at the *International Conference on Frontier Physics*, May 26, 2007, KITP-C, Beijing, China.
90. *The Search for Lepton-number Violation*  
plenary talk at the *Neutrino masses and the TeV scale physics*, Triumph, Canada, Oct. 20, 2007.
86. *The International Linear Collider: Challenge and Opportunity for China*  
plenary talk at the *Fragrant Hill Conference*, Dec. 5, 2007, Beijing, China.

2008:

91. *The Search for Lepton-number Violation*  
plenary talk at the *Wei-Hai Forum*, Wei-Hai, China, July 8, 2008.

2009:

92. *Kickoff for the Exotic Physics Working Group*  
plenary talk at the *LHC2FC: LHC to Future Colliders*, CERN, Feb. 9, 2009.

93. *Gauge Boson self-interactions*  
 plenary talk at the *LHC2FC: LHC to Future Colliders*, CERN, Feb. 13, 2009.
94. *Lepton-number Violation at the LHC*  
 plenary talk at the *Yukawa Symposium*, YITP, Kyoto University, Japan, March 10, 2009.
95. *Non-SUSY Beyond the Standard Model Physics*  
 plenary talk at the *Particle Physics and Cosmology 09*, University of Oklahoma, Norman, May 20, 2009.
96. *The “Top Priority” at the LHC*  
 plenary talk at the *Beyond the Standard Model at the LHC–2009*, Northeastern University, Boston, June 2, 2009.
97. *Missing Energy at the LHC: Dark Matter Connection*  
 plenary talk at the *Innovative Team Meeting*, Shandong University, Wei-Hai, China, July 23, 2009.
98. *Physics Working Group Summery*  
 plenary talk at the *Workshop on Physics, Detector and Accelerator at Muon Colliders*, Fermilab, Nov. 12, 2009.
- 2010:
99. *Genuine CP-Odd Observables and the Test of ZZH Coupling*  
 parallel talk at the *Workshop on International Linear Collider*, Beijing, China, March 29, 2010.
100. *CP Violation in ZZH Interaction*  
 plenary talk at the *MCTP Spring Symposium on Higgs Boson Physics*, Ann Arbor, Michigan, May 13, 2010.
101. *A Vision From The Top*,  
 conference concluding talk at the 3<sup>rd</sup> *International Workshop on Top Physics: Top-2010*, Bruges, Belgium, June 4, 2010.
102. *The Test of “Seesaw”*,  
 conference concluding talk at the *GoranFest*, in honor of Goran Senjenovic, Split, Croatia, June 12, 2010.
103. *Missing Mass Measurements at Colliders*,  
 talk at the *Workshop on The Dark Side of the Universe*, Aspen, Colorado. July 8, 2010.
104. *New Physics Expectations at the LHC*,  
 conference concluding talk at the *New Physics at the LHC*, Tsinghua University, China, Aug. 24, 2010.
105. *Colored Resonances at the LHC: Largest rate and Simplest Topology*,  
 Opening talk at the *SLAC Workshop on Topologies for Early LHC Searches*, Stanford National Linear Accelerator Lab., California, Sept. 22, 2010.

106. *Search for New Physics at the LHC*,  
Plenary talk at the *Kruger 2012: Discovery Physics at the LHC*, Kruger National Park, South Africa, Dec. 7, 2010.

2011:

107. *Phenomenology in the LHC Era*,  
Plenary talk at the *LHC Symposium*, National Taiwan University, Taiwan, Jan. 26, 2011.

108. *Dark Matter Theory*,  
Plenary talk at the *Deep Underground Physics Workshop*, ChengDu/Jin-Ping Mountain, Si-Chuan University, China, Jan. 28-29, 2011.

109. *Gauge-boson Self-interactions*,  
Plenary talk at the *LoopFest X: Uli Baur Memorial*, Northwestern University, May 12, 2011.

110. *Phenomenology in the New Era*,  
Plenary talk at the *Shanghai Particle physics, Cosmology Workshop*, Shanghai JiaoTong University, China, June 2, 2011.

111. *Theoretical Motivation for a Muon Collider*,  
Plenary talk at the *Workshop on Muon Collider Physics*, Telluride, Colorado, June 28, 2011.

112. *The Need for a Muon Collider*,  
Panel presentation at the *APS/DPF Meeting: Future Lepton Collider Forum*, Brown University, Providence, Rhode Island, August 12, 2011.

113. *The Search For Baryon Number Violation at the LHC*,  
Plenary talk at the *2011 International Conference on Baryon and Lepton Number Violation*, Great Smokey Mountains, Gatlinburg, Tennessee, Sept. 23, 2011.

114. *Strong  $W_L W_L$  Scattering*,  
Plenary talk at the *Workshop of Lattice Meets Experiments*, Fermilab, Illinois, Oct. 15, 2011.

2012:

115. *The Search for New Physics at the LHC*,  
Plenary talk at the *2012 Lake Louise Winter Institute*, Lake Louise, Alberta, Canada. Feb. 24, 2012.

116. *It's All About the Tau's*,  
Plenary talk at the *Chicago 2012 Workshop on LHC Physics*, University of Chicago, May 4, 2012.

117.  *$W_L W_L$  Scattering: Theory and Perspectives at the LHC*,  
Plenary talk at *The Next Stretch of the Higgs Magnificent Mile*, Northwestern University/Argonne Lab, Chicago, May 15, 2012.

118. *Implications for Non-SUSY Searches*,  
Plenary talk at the *2012 Recontres de Blois*, France, May 28, 2012.



119. *Majorana Neutrinos at the Intensity and Energy Frontiers*,  
Plenary talk at the *Neutrino 2012 Conference*, Kyoto, Japan, June 8, 2012.
120. *Missing Energy at the LHC: Dark Matter Connection*  
Plenary talk at *Workshop on The First Two Years at the LHC*, KITP-China, Beijing, June 19, 2012
121. *Missing Mass at the LHC: Antler and Cascade Topologies*  
Plenary talk at *CETUP\* 2012*, Sanford Underground Research Facilities, South Dakota, July 17, 2012.
122. *MSSM Higgs at the LHC*  
Parallel talk at *The 20th International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY2012)*, Peking University, Beijing, China, August 16, 2012.
123. *Higgs Boson and New Physics at the LHC*  
Plenary talk at *The 2012 TeV-Scale Physics Workshop*, Tsinghua University, Beijing, China, November 12, 2012.
124. *The Need for a Muon Collider*  
Plenary talk at *The ICFA beams dynamics workshop on Higgs Factories*, Fermilab, November 16, 2012.
125. *Higgs Couplings*  
Lead discussion at *Higgs Physics at the LHC Workshop*, KITP, Santa Barbara, Dec. 18, 2012.
- 2013:
126. *Higgs Physics at a Muon Collider*  
Plenary talk at *Higgs Snowmass Workshop at Princeton*, Jan. 14, 2013.
127. *Dark Matter and the Higgs in MSSM*  
Plenary talk at *TAMU Workshop on Dark Matter*, Texas A&M University, College Station, March 8, 2013.
128. *SUSY Dark Matter and the Higgs Boson*  
Plenary talk at *The LHC Higgs Signal: Characterization, Interpretation and BSM Model Implications*, University of California-Davis, April 23, 2013.
129. *The Higgs Boson and Beyond*  
Opening plenary talk at *The 26<sup>th</sup> International Symposium on Lepton Photon Interactions at High Energies*, SLAC, San Francisco, June 24, 2013.
130. *Future Facilities for Higgs Physics*  
Concluding plenary talk at the *International Symposium on Higgs Physics*, IHEP, Beijing, Aug. 16, 2013.
131. *Higgs Physics at the LHC*  
Plenary talk at *The 8th TeV Physics Working Group Workshop*, Dalian, China, Aug. 22, 2013.

132. *Higgs Factories and Beyond*  
Opening plenary talk at the *Kickoff Meeting for the CEPC/SppC Program*, IHEP, Beijing, Sept. 13, 2013.
133. *Anomalous Quartic Gauge Boson couplings*  
Workshop Summary talk at the *Workshop on the Anomalous Quartic Gauge Boson Couplings*. Dresden, Germany, Oct. 2, 2013.
134. *The Test of “Seesaw” at the LHC*  
Plenary talk at the workshop *From Majorana to LHC*, Trieste, Italy, Oct. 5, 2013.
135. *EW-kinos at the LHC*  
Plenary talk at the workshop *SM(at)New Energy Frontier*, FNAL, Illinois, Nov. 11, 2013.
- 2014:
136. *EW Physics After the Higgs Discovery*  
Plenary talk at the *Aspen Winter Conference*, Aspen, Colorado, Jan. 20, 2014.
137. *Future Searches at the LHC*  
Lead discussions at the *ATLAS Exotic Physics Working Group Open Meeting*, Eilat, Israel, Feb. 5-9, 2014.
138. *Future work for FCC in China*  
Lead discussions at *The 1<sup>st</sup> CFHEP Symposium on Circular Collider Physics*, IHEP, Beijing, China, Feb. 23-25, 2014.
139. *TGC & QGC: With a Light Higgs Boson*  
Plenary talk at the conference *SM(at)LHC, 2014*, Madrid, Spain, April 10, 2014
140. *Physics Cases for Future Colliders*  
Plenary talk at the conference: *The 2<sup>nd</sup> CFHEP Workshop*, IHEP, Beijing, China, Aug. 11, 2014.
141. *The Higgs Boson and Beyond*  
Plenary talk at the *Christmas Meeting*, IPPP, Durham, UK, Dec. 15, 2014.
- 2015:
142. *Top Quark As Partons*  
Plenary talk at the conference on *Future High Energy Physics*, IAS, Hong Kong University of Science and Technology, Jan. 7, 2015.
143. *Physics at the Very-Large Hadron Collider*  
Plenary talk at the Aspen Winter Conference on *Exploring the Physics Frontier with Circular Colliders*, Aspen Center for Physics, Jan. 27, 2015.
144. *Bread and Butter Physics at a Z-Factory*  
Plenary talk at the *Workshop on CEPC Precision Physics*, ITP, Beijing, China, March 9-10, 2015.
145. *A New Look at an Old Friend*  
Plenary talk at the *Key Aspects in Exploring Road to Unification: KAERU Conference*, IPMU, Japan, March 26, 2015.

146. *Test of See-Saw at Colliders*  
Invited talk at the *APS April Meeting, Neutrino Session*, Baltimore, April 12, 2015.
147. *Running of the Higgs Boson Mass*  
Plenary talk at the *MCTP Spring Higgs Symposium*, University of Michigan, April 21, 2015.
148. *Vision From the Top*  
Plenary talk at the *Gordon Research Conference*, HKUST, June 8, 2015.
149. *Top Quark As Partons*  
Plenary talk at the *10<sup>th</sup> TeV-Scale Physics Working Group Workshop*, UCAS, Beijing, Aug. 8, 2015.
150. *“Top Tools” for New Physics*  
Plenary talk at the *Large Hadron Collider Physics*, St. Petersburg, Sept. 2, 2015.
151. *Physics at Future Colliders*  
Concluding talk at the *Brookhaven Forum 2015: Great Expectations, A New Chapter*, Brookhaven National Lab, Long Island, Oct. 9, 2015.
152. *Physics at Future Colliders*  
Plenary talk at the *Annual Conference of the Korean Physical Society*, Gyeongju, South Korea, Oct. 22, 2015.
153. *Under the Higgs Lamppost*  
Keynote speech at the *National Center for Theoretical Science Annual Theory Meeting*, National Tsinghua University, Taiwan, Dec. 10, 2015.
- 2016:
154. *Closing Talk on Open Issues*, Closing talk at *IAS Program on High Energy Physics 2016*, Institute for Advanced Study, Hong Kong, Jan. 21, 2016.
155. *Higgs Boson and Beyond*  
Concluding talk at the *CUNY Symposium on Quantum Fields*, May 20, 2016.
156. *Weak Bosons at High Energies (or Dieter and Friends in Dairayland)*  
Keynote speech on the occasion *Aus Anlass des 60. Geburtstages von Herrn Prof. Dr. Dieter Zeppenfeld*, Karlsruhe Institute of Technology, June 3, 2016.
157. *High Lights of KITPC LHC Program: New Physics at the LHC Run 2*  
Summary talk at the *International Conference on Frontiers of Science on “Quantum Cosmo-Physics”*, Beijing, China, July 31, 2016.
158. *The Higgs Boson and Beyond*  
Opening talk at the *International Symposium on Higgs & Beyond*, Weihai, China, Aug. 15, 2016.
159. *Physics at Future Colliders in Light of the Higgs boson*  
Plenary talk at the *Search for new physics through the Higgs boson*, Gwangju, Korea, Oct. 16, 2016.

160. *Physics motivation for a Higgs factory*  
Keynote speech at the “*Fragrant Hill Forum*, Fragrant Hill Hotel, Beijing, Oct. 19, 2016.
161. *Electroweak splitting functions and the high energy showers*  
Plenary talk at the *National Center for Theoretical Science Annual Meeting*, National Tsinghua University, Taiwan, Dec. 6, 2016.
- 2017:
162. *Neutrino physics at the LHC*  
Plenary talk at the *Neutrinos: the quest for a new physics scale*, CERN, Geneva, March 28, 2017.
163. *Radiative Higgs decay to fermions*  
Plenary talk at the “*New physics interpretation for LHC data*”, Argonne National Lab., April 6, 2017.
164. *Physics with a 100 TeV Hadron Colliders*  
Plenary talk at *Particle Physics & Cosmology*, Texas A&M University-Corpus Christi, May 24, 2017.
165. *Physics at Future Colliders in Light of the Higgs boson*  
Plenary talk at *PASCOS 2017*, IFT, Madrid, Spain, June 23, 2017.
166. “*Unique Role*” of Future  $e^+e^-$  Colliders  
Plenary talk at the *Gordon Research Conference*, HKUST, June 28, 2017.
167. *Some Thoughts on CEPC Physics*  
Plenary talk at the *CEPC Physics Workshop*, CFHEP-IHEP, Beijing, July 14, 2017.
168. *The Higgs Boson Radiative Decays*  
Plenary talk at the *NCTS 20<sup>th</sup> Anniversary Symposium: Frontiers in Physics*, Tsinghua University, Taiwan, Aug. 3, 2017.
169. *Unblinding the SUSY DM Blind Spots*  
Plenary talk at the *Workshop on WIMP DM & Beyond*, TDLI, SJTU, Shanghai, Sept. 18, 2017.
170. *What Henry Said About the “Giant Collider”*  
Plenary talk at the *HenryFest*, Cornell University, Oct. 9, 2017.
- 2018
171. *Physics Motivations for Future Colliders*  
Plenary talk at the *5<sup>th</sup> Chilean School of High Energy Physics*, Universidad Tecnica Federico Santa Maria, Jan. 12, 2018.
172. *Higgs Couplings at High Scales*  
Plenary talk at *2018 Aspen Winter Conference*, Aspen Center for Physics, Colorado, March 30, 2018.
173. *Physics Potential of the LHC Upgrades*  
Concluding talk (Wine and Cheese Seminar) at the *HL-LHC/HE-LHC Workshop*, Fermilab, April 6, 2018.

174. *Physics Potential at Future Colliders*  
Invited talk at the *US CMS Annual Meeting*, Minneapolis, May 18, 2018.
175. *Physics Potential of the LHC Upgrades*  
Plenary talk at *PLANCK 2018*, Bonn, Germany, May 25, 2018.
176. *Higgs Couplings at High Scales*  
Plenary talk at *PASCOS 2018*, Case Western Reserve U., June 6, 2018.
177. *Higgs Measurements at Future Colliders*  
Plenary talk at *Higgs Hunting 2018*, Orsay-Paris, France, July 25, 2018.
178. *EW Sector at High Energies*  
Opening talk at the *24<sup>th</sup> Summer Institute*, Panshan, China, Aug. 13, 2018.
179. *Prospects for Multi-boson Physics at Future Colliders*  
Plenary talk at *Multi-Boson Interactions*, An Arbor, Michigan, Aug. 28, 2018.
180. *In preparation for DPF Submission to European Strategy Group*  
Invited talk at the *Energy Frontier Group Meeting*, Fermilab, Sept. 25, 2018.
181. *Higgs Couplings at High Scales*  
Plenary talk at *Beyond BSM Workshop*, Ikaho, Gumma prefecture, Tenbo Hotel, Japan, Oct. 2, 2018.
182. *Higgs Physics at HL/HE LHC and Beyond*  
Concluding talk at *Higgs Couplings 2018*, Ryogoku Tokyo, Japan, Nov. 30, 2018.
- 2019
183. *Constraints on Neutrino Parameters from Colliders*  
Plenary talk at *DCPIHEP 2019 Workshop*, Comala, Colima, Mexico, Jan. 11, 2019.
184. *What is the Next?*  
Concluding talk at *The 14<sup>th</sup> Workshop for the TeV-Scale Physics Working Group*, Nanjing, China, April 22, 2019.
185. *How To Pronounce It? Dimitri Nanopoulos*  
Plenary talk at *Mitchell Conference on Collider, DM, Neutrino Physics*, College Station, Texas, May 15, 2019.
186. *Physics Motivations for Future Colliders*  
Plenary talk at *SUSY 2019*, Texas A&M University-Corpus Christi, May 20, 2019.
187. *Overview of Neutrino Physics at Colliders*  
Plenary talk at *NTN Workshop on Neutrino NSI*, Washington University, St. Louis, May 29, 2019.
188. *Make No Stone Unturned*  
Plenary talk at *2<sup>nd</sup> Frontier Forum on Particle Physics*, Sichuan University, Chengdu, China, June 9–11, 2019.
189. *Beyond QCD and Beyond the LHC*  
Concluding remarks at *QCD at the LHC 2019*, University at Buffalo, SUNY, July 19, 2019.

190. *DPF Planning on Snowmass Activities*  
Remarks at *the 2019 ACP summer program*, Aspen Center for Physics, Aspen, Aug. 15, 2019.
191. *Collider Tests of NSI*  
Plenary talk at *Neutrino Platform Week 2019: Hot Topics in Neutrino Physics*, CERN, Geneva, Oct. 5–11, 2019.
192. *Non-Standard Neutrino Interactions*  
Plenary talk at *the NCTS Annual Theory Meeting*, NTHU, Taiwan, Dec. 12, 2019.
- 2020
193. *High-energy Lepton Collisions and EW PDFs*  
Plenary talk at *the BL Violation Circa 2020*, July 8, 2020.
194. *High-energy Lepton Collisions and EW PDFs*  
Talk at the *Snowmass Theory Frontier TG07*, Sept. 15, 2020.
195. *Muon Collider Physics: Recent Pheno Developments*  
Plenary talk at the *Conference on Muon Collider Exploration*, Dec. 10, 2020.

## (5). Seminars And Colloquia

1989:

1. *Large  $p_T$  Vector Boson Production in Hadron Collisions*  
seminar at the Brookhaven National Laboratory, June, 1989.
2. *Some New Aspects of SUSY R-Parity Violating Interactions*  
seminar at the University of Maryland, June, 1989.

1990:

3. *Multiple Vector Boson Production and Higgs-Boson-Related Physics*  
seminar at the Argonne National Laboratory, January, 1990.
4. *Searching for Strong  $W^+W^+$  Scatterings at the SSC*  
seminar at the Northwestern University, Oct. 8, 1990.
5. *Strong  $W^+W^+$  Scattering Signals at  $pp$  Supercolliders*  
seminar at the Fermi National Accelerator Laboratory, Nov. 15, 1990.

1991:

6. *Strong Weak-Boson-Scattering Signals at the SSC*  
seminar at the Argonne National Laboratory, April 24, 1991.
7. *Will the SSC Be a No-lose Machine in Searching for EW Symmetry Breaking?*  
seminar at the Purdue University, Oct. 15, 1991.

1992:

8. *Weak-Boson Strong Scattering at the SSC*  
seminar at the Lawrence Berkeley Laboratory, July. 24, 1992.
- 1993:
9. *Electroweak Symmetry Breaking and the Higgs Boson in the Standard Model*  
seminar at the University of California at Davis, Feb. 8, 1993.
10. *Electromagnetic Mass Differences for Heavy-Light Mesons*  
seminar at the University of California at Davis, Feb. 9, 1993.
11. *The “Top” Issue at the Fermilab Tevatron*  
seminar at the Stanford Linear Accelerator Center, March 8, 1993.
12. *The “Top” Issue in the Standard Model*  
colloquium at the Iowa State University, Ames, April 5, 1993.
- 1994:
13. *The “Top” Issue at the Fermilab Tevatron Collider*  
seminar at the Lawrence Berkeley Laboratory, Berkeley, March 18, 1994.
14. *Weak Boson and Higgs Boson Production at  $e^-e^-$  Colliders*  
seminar at the Stanford Linear Accelerator Center, June 23, 1994.
15. *Amplitude Zeros in  $W^\pm Z$  Production*  
seminar at the Lawrence Berkeley Laboratory, Berkeley, August 22, 1994.
- 1995:
16. *Top-Quark Decay via FCNC at Hadron Colliders*  
seminar at the University of Wisconsin - Madison, Nov. 19, 1995.
- 1996:
17. *Strongly-interacting Electroweak Symmetry Breaking Sector*  
colloquium at the Carleton University, Ottawa, Canada, Sept. 9, 1996.
18. *Low Lying States in a Strongly-interacting Electroweak Sector*  
seminar at the University of Wisconsin - Madison, Sept. 13, 1996.
- 1997:
19. *Weakly Coupled Higgs Bosons*  
seminar at the University of Wisconsin - Madison, Jan. 23, 1997.
20. *Physics Potential at  $\mu^+\mu^-$  Colliders*  
seminar at University of Illinois - Urbana, April 22, 1997.
21. *Multiple Parton Scattering in Photon and Proton Collisions*  
seminar at DESY, Hamburg, Germany, May 5, 1997.
22. *Double Parton Scattering at the Tevatron*  
seminar at the CDF QCD Working Group, June 19, 1997.
23. *Messenger Sneutrino as Cold Dark Matter*  
seminar at the Aspen Center for Physics, August 7, 1997.

24. *Cold Dark Matter in Gauge-Mediated SUSY Breaking Models*  
seminar at the Argonne National Laboratory, September 17, 1997.
25. *Particle Dark Matter in SUSY Theories*  
seminar at the Institute of High Energy Physics, Beijing, China, Oct. 27, 1997.
26. *Cold Dark Matter in Gauge-Mediated SUSY Breaking Models*  
seminar at the Lawrence Berkeley National Laboratory, November 26, 1997.
- 1998:
27. *Messenger-Matter Interactions in Gauge-Mediated SUSY Breaking Models*  
seminar at the Argonne National Laboratory, Oct. 29, 1998.
28. *Physics Potential at Muon Colliders*  
seminar at the Michigan State University, Dec. 8, 1998.
29. *Physics with Large Extra Dimensions*  
seminar at the Michigan State University, Dec. 9, 1998.
- 1999:
30. *On the Large Extra Spatial Dimensions*  
seminar at the Institute of High Energy Physics, Beijing, China, March 1, 1999.
31. *Collider Physics With Large Extra Dimensions*  
seminar at Sendai University, Japan, March 8, 1999.
32. *Physics with Large Extra Dimensions*  
seminar at Yukawa Institute for Theoretical Physics, Kyoto, Japan, March 11, 1999.
- 2000:
33. *Physics Potential for the Tevatron Tripler*  
Joint Experimental and Theoretical (“Wine & Cheese”) seminar at Fermilab, March 3, 2000.
34. *Physics with Large Extra Dimensions*  
departmental colloquium at the Iowa State University, March 6, 2000.
35. *Future Collider Physics*  
seminar at the Theoretical Physics Institute, University of Minnesota, April 21, 2000.
- 2001:
36. *Higgs Bosons at Future Colliders*  
seminar at the University of Pennsylvania, March 19, 2001.
37. *EDM, CP Violation in SUSY, and Linear Colliders*  
seminar at the University of Pennsylvania, March 20, 2001.
38. *Theory and Phenomenology with Extra Dimensions*  
seminar at the University of Maryland, May 2, 2001.
39. *EDM, CP Violation in SUSY, and Linear Colliders*  
seminar at the University of Illinois–Urbana, Spet. 17, 2001.



40. *EDM and CP-Phases in SUSY*  
seminar at the Oklahoma State University, Oct. 25, 2001.
41. *The Search for Extra Dimensions*  
departmental colloquium at the Oklahoma State University, Oct. 25, 2001.
- 2002:
42. *Extra dimension phenomenology and TeV String Excitations*  
seminar at the Würzburg University, Germany, July 24, 2002.
43. *EDM and CP violation in SUSY*  
seminar at the National Tsing-Hua University, Taiwan, Oct. 1, 2002.
44. *Physics with extra dimensions*  
department colloquium at the National Central University, Taiwan, Oct. 2, 2002.
45. *EDM and CP violation in SUSY*  
seminar at the National Taiwan University, Taiwan, Oct. 3, 2002.
46. *Extra dimension physics and TeV string resonances*  
seminar at the Academia Sinica, Taiwan, Oct. 4, 2002.
47. *TeV string resonances*  
seminar at the IHEP, Beijing, China, Oct. 10, 2002.
48. *TeV string resonances*  
seminar at the ITP, Beijing, China, Oct. 11, 2002.
49. *EDM and CP violation in SUSY*  
seminar at the Tsing-Hua University, China, Oct. 15, 2002.
50. *Extra dimension physics and TeV string resonances*  
colloquium at the Beijing University, China, Oct. 16, 2002.
- 2003:
51. *Little Higgs Phenomenology*  
seminar at the University of Delaware, Feb. 20, 2003.
52. *TeV string excitations and HE cosmic neutrinos*  
seminar at the University of Delaware, Feb. 21, 2003.
53. *TeV string Resonances and HE cosmic neutrinos*  
seminar at the KEK, Tsukuba, Japan, March 20, 2003.
54. *Little Higgs Phenomenology*  
seminar at the KITP, University of California–Santa Barbara, April 1, 2003.
55. *TeV string excitations and HE cosmic neutrinos*  
seminar at the CalTech, April 7, 2003.
56. *Little Higgs Phenomenology*  
seminar at the University of California–Los Angeles, April 8, 2003.
57. *TeV string excitations and HE cosmic neutrinos*  
seminar at SLAC, April 9, 2003.

58. *Phenomenology of the Little Higgs Models*  
seminar at the ITP, Beijing, China, Oct. 9, 2003.
59. *Phenomenology of the Little Higgs Models*  
seminar at the Tsing-Hua University, Beijing, China, Oct. 10, 2003.
60. *Little Higgs and the Phenomenology*  
seminar at the University of Florida, Nov. 4, 2003.

2004:

61. *Techniques in Collider Phenomenology*  
seminar at the Beijing University, China, July 14, 2004.
62. *Phenomenology of the Little Higgs Models*  
seminar at the Michigan State University, Oct. 12, 2004.
63. *Phenomenology of TeV-Scale String resonances*  
seminar at the University of Michigan, Oct. 22, 2004.
64. *Earthly and Heavenly Signatures for TeV-Scale String resonances*  
seminar at the University of Arizona, Oct. 28, 2004.
65. *The Search for Extra-dimensions*  
colloquium at the University of Arizona, Oct. 29, 2004.
66. *Collider Phenomenology: Little Higgs Studies as an Example*  
seminar at Harvard University, Nov. 17, 2004.
67. *Little Higgs Models at the LHC*  
seminar at the LHC Physics Center, Fermilab, Nov. 23, 2004.
68. *Earthly and Heavenly Signatures for TeV-Scale String resonances*  
seminar at the Northwestern University, Nov. 29, 2004.
69. *Earthly and Heavenly Signatures for TeV-Scale String resonances*  
seminar at the Argonne National Lab, Dec. 10, 2004.
70. *Smoking-Gun Signatures for Little Higgs Models at Hadron Colliders*  
Wine & Cheese seminar at Fermilab, Dec. 17, 2004.
71. *Majorana Neutrino Masses and the Lepton-number Violation*  
seminar at the NewPhenomenaStudyGroup, Fermilab, Dec. 23, 2004.

2005:

72. *Low-energy Processes for Lepton-number Violation*  
seminar at the Phenoclub, CERN, April 7, 2005.
73. *Little Higgs Phenomenology*  
seminar at DESY, Germany, April 15, 2005.
74. *The Search for Extra-dimensions*  
colloquium at the Karlsruhe University, Germany, April 22, 2005.

2006:

- 75. *Majorana Neutrinos at Hadron Colliders*  
seminar at the University of California, Berkeley, March 20, 2006.
- 76. *Searching for Majorana Neutrinos at Hadron Colliders*  
seminar at the University of California, Davis, March 22, 2006.
- 77. *TeV-scale Physics: The Next Two Decades*  
colloquium at the Harbin Institute of Technology, China, July 18, 2006.
- 78. *The Search for Lepton-number Violation*  
Theory/Experiment joint seminar at KEK, Tsukuba, Japan, Sept. 27, 2006.
- 79. *High Energy Physics: The Next Two Decades*  
colloquium at the Israel Institute of Technology, (Technion) Haifa, Nov.16, 2006.

2007:

- 80. *The Search for Lepton-number Violation*  
seminar at the Princeton University, April 4, 2007.
- 81. *The Search for Lepton-number Violation*  
seminar at the State Univ. of New York, Stonybrook, April 25, 2007.
- 82. *High Energy Physics: The Next Two Decades*  
colloquium at Shan-Dong University, June 5, 2007.
- 83. *High Energy Physics: The Next Two Decades*  
colloquium at the Qu-Fu Normal University, June 6, 2007.
- 84. *The Search for Lepton-number Violation*  
seminar at the Harbin Institute of Technology, June 15, 2007.
- 85. *The Search for Lepton-number Violation*  
seminar at Peking University, June 21, 2007.
- 86. *High Energy Physics: The Next Two Decades*  
colloquium at the University of Oklahoma, Sept. 27, 2007.
- 87. *High Energy Physics: The Next Two Decades*  
colloquium at the Virginia Tech., Nov. 30, 2007.
- 88. *The Future of High Energy Physics*  
colloquium at Xia-Men University, China, Dec. 24, 2007.

2008:

- 89. *High Energy Physics: The Next Two Decades*  
colloquium at the Harish-Chandra Research Institute, Allahabad, India, Jan. 11, 2008.
- 90. *High Energy Physics: The Next Two Decades*  
colloquium at the Indian Institute of Sciences, Bangalore, India, Jan. 18, 2008.
- 91. *High Energy Physics: The Next Two Decades*  
colloquium at UC-Riverside, Feb. 22, 2008.

92. *The Search for Lepton-number Violation*  
seminar at the University of Colorado, Boulder, March 14, 2008.
93. *The Search for Lepton-number Violation*  
seminar at UC-Irvine, April 16, 2008.
94. *High Energy Physics: The Next Two Decades*  
colloquium at UC-Irvine, April 17, 2008.
95. *The Search for Lepton-number Violation*  
seminar at the University of Liverpool, Great Britan, July 3, 2008.
96. *High Energy Physics: The Next Two Decades*  
colloquium at the Texas Tech University, Lubbock, TX, Nov. 13, 2008.
- 2009:
97. *Lepton-number Violation at Colliders*  
seminar at the University of Chicago, Jan. 28, 2009.
98. *The Search for Lepton-number Violation*  
seminar at Boston University, March 2, 2009.
99. *The Origin of Mass*  
colloquium at Shandong University, JiNan, China, July 6, 2009.
100. *The Top-quark Physics*  
seminar at Shandong University, JiNan, China, July 7, 2009.
101. *The Origin of Mass*  
colloquium at the Northeastern University, Xi'An, China, July 9, 2009.
102. *On the Origin of Mass*  
colloquium at the Harbin Institute of Technology, Harbin, China, July 14, 2009.
103. *The "Top Priority" at the LHC*  
seminar at Peking University, China, July 27, 2009.
104. *Missing Energy and Missing Mass at the LHC*  
seminar at Cornell University, Sept. 25, 2009.
105. *Missing Energy and Missing Mass at the LHC*  
seminar at University of Maryland, Sept. 30, 2009.
- 2010:
106. *High Energy Physics: The Next Two Decades*  
colloquium at the Carnegie-Mellon University, April 29, 2010.
107. *The Test of Seesaw*,  
seminar at the International Center for Theoretical Physics, Trieste, Italy, May 4, 2010.
108. *My View of Contemporary High Energy Physics*,  
seminar at the International Center for Theoretical Physics, Trieste, Italy, May 5, 2010.

109. *The Quest for Mass*  
colloquium at the Pittsburgh University, Oct. 4, 2010.
110. *High Energy Physics: The Next Two Decades*  
colloquium at Syracuse University, Oct. 21, 2010.
111. *The Test for Low-scale Seesaw*  
seminar at Syracuse University, Oct. 22, 2010.
112. *High Energy Physics: The Next Two Decades*  
colloquium at Vanderbilt University, Oct. 28, 2010.
113. *The Test for Low-scale Seesaw*  
seminar at Vanderbilt University, Oct. 29, 2010.
114. *The Search for New Physics at the LHC*  
seminar at the ICTP, Trieste, Italy, Dec. 13, 2010.
- 2011:
115. *High Energy Physics: The Next Two Decades*  
colloquium at the National Central University, Taiwan, Jan. 24, 2011.
116. *Heavy Quarks at the LHC*  
seminar at the National Taiwan University, Taiwan, Jan. 25, 2011.
- 2012:
117. *Missing Energy and Missing Mass: The Dark Matter Connection*  
seminar at the Carnegie Mellon University, Jan.24, 2012.
118. *The Test for Seesaw at the LHC*  
seminar at the Perimeter Institute, Canada, March 5, 2012.
119. *New Physics Searches at the LHC*  
seminar at Nankai University, Tianjin, China, July 2, 2012.
120. *www.Higgsology: The Theory and Practice*  
colloquium at the University of Arizona, Oct. 5, 2012.
- 2013:
121. *Higgsology: The Theory and Practice*  
colloquium at Tsinghua University, China, March 25, 2013.
122. *Dark Matter and Higgs Bosons in MSSM*  
seminar at Tsinghua University, China, June 4, 2013.
123. *LHC Physics After the Higgs Discovery*  
seminar at the Center for High Energy Physics Peking Univ., Oct. 16, 2013
124. *The 2013 Nobel Prize and The Higgs Boson*  
Public Lecture at Renmin University of China, Oct. 17, 2013.
125. *Reveal the Nature of EWSB: WW Scattering Theory & Practice*  
colloquium at the MIT Lab of Nuclear Science, MIT, Cambridge, Oct. 28, 2013.

126. *The Higgs Boson & the 2013 Nobel Prize*  
Public Lecture at the Univ. of Pittsburgh, Oct. 30, 2013.
- 2014:
127. *Light Dark Matter: Direct/Indirect and collider searches*  
seminar at KIAS, July 25, 2014.
128. *The 2013 Nobel Prize and The Higgs Boson*  
Public Lecture at Harbin Institute of Technology, China, Sept. 10, 2014.
- 2015:
129. *The Physics of Academic Career: A Balancing Act*  
Keynote speech at the *Physics Department Retreat*, University of Texas-Dallas,  
Jan. 30, 2015.
130. *Tests of See-saw at Colliders*  
seminar at the Chinese University of Science and Technology, June 25, 2015.
131. *The Higgs Boson & Beyond*  
seminar at ShangHai Jiao-Tong University, June 29, 2015.
132. *www.Higgsology: A Story for Mass Generation*  
colloquium at the China-Eastern Normal University, June 30, 2015.
133. *Physics at Future Colliders*  
seminar at Institute of Basic Science, Center for Theoretical Physics of the Universe,  
Korea, Oct. 28, 2015.
134. *Physics Motivations for Future Colliders*  
seminar at Yonsei University, Seoul, Korea, Oct. 29, 2015.
135. *Tests of See-saw at Colliders*  
seminar at the Korean Institute of Advanced Study, Seoul, Korea, Nov. 2, 2015.
136. *Tests of See-saw at Colliders*  
seminar at the Seoul National University, Korea, Nov. 5, 2015.
137. *Top Quark as a Parton*  
seminar at the Korean Institute of Advanced Study, Seoul, Korea, Nov. 6, 2015.
- 2016:
138. *Higgs Boson and Beyond*  
colloquium at the Sun Yet-Sen University, Guangzhou, China, Jan. 22, 2016.
139. *The Higgs Boson and Beyond*  
colloquium at the University at Buffalo, SUSY, March 10, 2016.
140. *Splitting and Showering in the EW Sector*  
seminar at Penn State University, March 23, 2016.
141. *Physics at Future Hadron Colliders*  
Wine & Cheese seminar at Fermilab, May 13, 2016.

142. *Physics Motivations for Future Colliders*  
Colloquium at the workshop *Multiple Faces for Naturalness*, Aspen Center for Physics, June 16, 2016.
143. *Physics Motivations for Future Colliders*  
Colloquium at the China University of Science of Technology, Hefei, July 15, 2016.
144. *The Origin of Mass, the Higgs Boson, and the LHC*  
Colloquium at the Kavli Institute for Theoretical Physics, Beijing, China, July 18, 2016.
145. *Physics Motivations for Future Colliders*  
Colloquium at the *Integrable System Summer School*, Northwest University, Xi'An, China, July 29, 2016.
146. *Electroweak splitting functions and high energy showers*  
Seminar at the University of Texas-Austin, Oct. 11, 2016.
147. *Physics Motivations for Future Colliders*  
Colloquium at the University of Texas-Austin, Oct. 12, 2016.
148. *Physics Motivations for Future Colliders*  
Colloquium at the Case Western University, Nov. 3, 2016.
149. *Electroweak splitting functions and high energy showers*  
Seminar at the Case Western University, Nov. 4, 2016.
- 2017:
150. *Unblinding the SUSY dark matter blind spots*  
Seminar at the Lawrence Berkeley National Lab., April 13, 2017.
151. *Electroweak splitting functions and high energy showers*  
Seminar at the Stanford Linear Accelerator National Lab., April 14, 2017.
152. *The Higgs Boson and Beyond*  
Colloquium at Fudan University, China, May 17, 2017.
153. *Physics Motivations for Future Colliders*  
Colloquium at the Harbin Institute of Technology, May 19, 2017.
154. *Unblinding the SUSY DM Blind Spots*  
Seminar at the Experimental Physics Division, IHEP, Beijing, July 20, 2017.
155. *Physics Motivations for Future Colliders*  
Joint Theory-Experiment Seminar, Cornell University, Oct. 6, 2017.
156. *Under the Higgs Lamppost: Physics Motivations for Future Colliders*  
Colloquium at the *LHC Chapter II*, International Institute of Physics, Natal, Brazil, Nov. 16, 2017.
- 2018:
157. *Physics Motivations for Future Colliders*  
Colloquium at the Ohio State University, Columbus, Feb. 6, 2018.

158. *Physics Motivations for Future Colliders*  
Colloquium at the University of Cincinnati, Cincinnati, Feb. 8, 2018.
159. *Electroweak Sector at High Energies*  
Seminar at the BSM Forum, CERN Theory Department, CERN, March 15, 2018.
160. *Higgs Physics at High Scales*  
Seminar at the University of Wisconsin, Madison, April 3, 2018.
161. *Physics Potential of the LHC Upgrades*  
Wine and Cheese Seminar at Fermilab (also as the concluding talk at the *HL-LHC/HE-LHC Workshop*), April 6, 2018.
162. *The Higgs Boson and Beyond*  
Tiench-Tea seminar at the ITP, University of Heidelberg, July 19, 2018.
163. *Future of High Energy Physics – Under the Higgs Lamppost*  
Colloquium at the University of Pittsburgh, Sept. 10, 2018.
164. *Higgs Physics at High Scales*  
Seminar at the University of Toronto, Canada, Oct. 19,
- 2019:
165. *Higgs Physics at High Scales*  
Joint seminar at the JHU/UMD, Baltimore, Jan. 30, 2019.
166. *Higgs Physics at High Scales*  
Seminar at the University of Pennsylvania, Philadelphia, Feb. 11, 2019.
167. *The Quest for Nature – Fifty Years of Discoveries in HEP*  
Colloquium at Nanjing Normal University, April 22, 2019.
168. *High Energy Physics under the Higgs Boson Lamppost*  
Colloquium at ITP, Chinese Academy of Sciences, Beijing, April 26, 2019.
169. *Quest for Nature: Fifty Years of Discoveries in HEP*  
Colloquium at Beihang University, Beijing, June 21, 2019.
170. *Prospects on Future Colliders*  
Colloquium at ShanDong University, Jinan, June 24, 2019.
171. *Quest for Nature: Fifty Years of Discoveries in HEP*  
Colloquium at Shanghai Jiao Tong University, Shanghai, June 26, 2019.
172. *On the way to discoveries – Outstanding problems in particle physics and motivation for next generation experiments*  
Cordon Research Seminar at *the Gordon Research Conference*, Hong Kong University of Science and Technology, Hong Kong, June 29, 2019.
173. *Quest for Nature: Fifty Years of Discoveries in HEP*  
Colloquium at the California State University-Fresno, Aug. 23, 2019.
- 2020:
174. *High-Energy Physics Under the Higgs Lamppost*  
Colloquium at the University of Michigan, Feb. 26, 2020.



175. *Quest for Mass*  
Colloquium (on-line virtual) at Xin-Jiang University, China, Aug. 24, 2020.
176. *Testing Seesaw Model: From meson Decays to Colliders*  
Seminar (on-line virtual) at Tsinghua University, China, Sept. 23, 2020.
177. *Physics Potential for Muon Colliders*  
Seminar at Pitt PACC, Oct. 1, 2020.
178. *Quest for Mass*  
Colloquium (on-line virtual) at the TD Lee Institute, Shanghai Jiao-Tong University, China, Oct. 19, 2020.

## (6). Invited Lectures

1996:

1. *Electroweak Symmetry Breaking Physics at Colliders*  
One-week lectures at the China Center of Advanced Science and Technology (CCAST), Beijing, July 22-26, 1996.

1997:

2. *Physics Potential for  $\mu^+\mu^-$  Colliders*  
Two-lecture series at Fermilab, April, 1997.

1999:

3. *Physics Potential at Muon Colliders*  
At the X JORGE ANDRE SWIECA SUMMER SCHOOL, Aguas de Lindoia, Brazil, Feb. 6–12, 1999.
4. *Physics with Large Extra Dimensions*  
At the X JORGE ANDRE SWIECA SUMMER SCHOOL, Aguas de Lindoia, Brazil, Feb. 6–12, 1999.
5. *Physics at Future Linear Colliders*  
One-week lectures at the China Center of Advanced Science and Technology (CCAST), Beijing, July 5–9, 1999.

2000:

6. *Physics at the CERN Large Hadron Collider*  
One-week lectures at the China Center of Advanced Science and Technology (CCAST) and the Institute of Theoretical Physics, Beijing, Dec. 17–23, 2000.

2001:

7. *Physics beyond the Electroweak Scale*  
one-week lectures at the China Center of Advanced Science and Technology (CCAST), Beijing, July 30–Aug. 3, 2001.

2004:

8. *Collider Phenomenology: Dynamics and Kinematics*  
Four-lecture series at TASI 2004, Boulder, Colorado, June 9–13, 2004.
  9. *Physics Beyond the Standard Model*  
At the CTEQ Summer School 2004, June 27, Madison, Wisconsin.
  10. *Workshop on Frontier Physics of Cosmology/Large Hadron Collider*  
Three-lecture series at the China Center of Advanced Science and Technology (CCAST) and the Institute of Theoretical Physics, Beijing, July 2–10, 2004.
- 2005:
9. *Electroweak Physics without SUSY*  
Two lectures at the University of Bonn, April 19–20, Bonn, Germany.
  10. *Physics Beyond the Standard Model*  
At the CTEQ Summer School 2005, May 26, Puebla, Mexico.
  11. *Physics at  $e^+e^-$  Linear Colliders*  
One-week lectures at Tsing-Hua University, Beijing, China, July 15–20, 2005.
- 2006:
12. *Physics at Hadron Colliders: From kinematics to dynamics*  
Three-hour lectures at CERN LHC Olympics, Feb. 9–10, 2006.
  13. *TeV-scale Physics: The next two decades*  
Invited panel presentation at the National Science Foundation of China Forum (*Fragrant Hill Forum*), Feb. 22, 2006, Beijing.
  14. *Collider Physics: Basic knowledge and Techniques*  
One-week lectures at Tsing-Hua University, Beijing, China, July 26–30, 2006.
  15. *Pythia Tutorial*  
lecture at the Aspen 2006 workshop, *Particle Theory in the Anticipation of the LHC*, Aspen, Colorado, August 11, 2006.
  16. *Collider Phenomenology: Dynamics and Kinematics*  
Five-lecture series at the Asian School of Particle, String and Cosmology, Laforet Nasu, Japan, Sept.25–29, 2006.
  17. *Collider Phenomenology: From Kinematics to Dynamics*  
Four-lecture series at the National School of LHC Physics, The Weizmann Institute and Technion, Israel, Nov.12–17, 2006.
- 2007:
18. *The Search for New Physics at Colliders*  
Three-lecture series at the *The International Summer School of CSPIN*, The Graduate School of Chinese Academy of Sciences, Beijing, China, June 18–20, 2007.
  19. *Collider Physics and New Physics Signals*  
Three-lecture series at the *The Summer School of Particle Physics, Strings, and Cosmology*, The Perimeter Institute of Theoretical Physics, Canada, Aug. 6–18, 2007.

2008:

20. *Collider Physics and New Physics Searches*  
Three-lecture series at the *The Summer School of Particle, Strings and Cosmology*,  
The Sheffield University, United Kingdom, July 1–3, 2008.
21. *Collider Physics and New Physics Searches*  
Twelve-hour series at the Harbin Institute of Technology, China, Oct. 14–30, 2008.

2009:

22. *Lectures on Collider Physics and New Physics Searches*  
Four-hour series at the *Summer School on Particle Physics in the LHC Era*, The Ab-  
dus Salam International Center for Theoretical Physics, Trieste, Italy, June 15–26,  
2009.
23. *Lectures on Collider Physics*  
Five-hour series at the *BUSSTEPP (British Univ. Summer-School on Theo. Ele-  
mentary Particle Physics)*, The University of Liverpool, United Kingdom,  
Aug. 24–Sept. 4, 2009.

2010:

24. *Lectures on Collider Physics*  
Three-hour series at the *LHC Physics Summer School*, TsingHua University,  
Beijing, China, Aug. 16–21, 2010.
25. *Lectures on Collider Physics*  
Five-hour series at the *BUSSTEPP (British Univ. Summer-School on Theo. Ele-  
mentary Particle Physics)*,  
The University of Swansea, United Kingdom, Sept. 2–6, 2010.

2011:

26. *Collider Phenomenology at the LHC*  
Three-hour series at the *Particle Physics Phenomenology Workshop IX*,  
National Central University, Taiwan, June 3–6, 2011.

2012:

27. *The Quest for Mass*  
*Zhong-Shan Distinguished Lecture* at Nanjing University, China, April 12, 2012.
28. *The Quest for Mass: From Sub-atomic to the Universe*  
Public Lecture at the Allegheny Observatory, University of Pittsburgh, May 18,  
2012.
29. *Selected Topics for Searching for New Physics at the LHC*  
Three-hour series at Nankai University, Tianjin, China, Aug. 8–9, 2012.
30. *Higgs Physics: Theory*  
Three-hour series at the German Physical Society School of Physics, Bad Honnef,  
Germany, Sept. 16–21, 2012.

2013:

31. *Higgsiology: Higgs Theory and Practics*  
Five-hour lecture series at the “*Sangam at HRI: Instructional Workshop in Particle Physics*”, Harris-Chandra Research Institute, Allahabad, India, March 25–30, 2013.
32. *Lectures on Collider Physics*  
Three-hour series at the *BCVSPIN*, ZheJiang University, HangZhou, China, June 7–14, 2013.
33. *Collider Physics and the Higgs Boson*  
Twelve-hour Mini course at KIAS (Korea Institute for Advanced Study), June 17–21, 2013.
- 2014:
34. *The Higgsology*  
Four-lecture series at TASI 2014, Boulder, Colorado, June 17–20, 2014.
- 2015:
35. *Collider Physics: From Basic Knowledge to New Physics Searches*  
Three-hour lectures at the Chinese HEP Summer School (UCAS), July 27–31, 2015.
36. *The Standard Model of Electroweak & Strong Interactions*  
Four-hour lectures at iSTEP, ShanDong University, China, Aug. 12–13, 2015.
37. *The Tests of See-saw at the LHC*  
Lecture at the SLAC Summer Institute 2015, SLAC, Aug. 19, 2015.
38. *Collider Physics in the LHC Era and Beyond*  
Two-hour lectures at the Pre-SUSY Symposium, UC-Davis, Aug. 20–22, 2015.
39. *The Path to Discovery in High Energy Physics*  
Inaugural Lecture for Distinguished Professor of High Energy Physics, Dietrich School of Arts and Sciences, Sept. 10, 2015.
- 2016:
40. *The Standard Model of Electroweak & Strong Interactions*  
Four-hour lectures at *International Schools for Theoretical & Experimental Physics* (iSTEP), Tsinghua University, China, July 12–13, 2016.
41. *High Energy Physics: the Past, the Present, and the Future*  
Five-hour lectures for *2016 Summer School for Outstanding Undergraduate Students*, Tsinghua University, China, July 19–20, 2016.
- 2017:
42. “*Physics Cafe and Lecture*”, Aspen Center for Physics, Aspen, Colorado, March 22, 2017.
43. *The Standard Model & Beyond*  
Four-hour lectures at *International Schools for Theoretical & Experimental Physics* (iSTEP), Shanghia Jiao-Tong University, China, June 28–30, 2017.

44. *Brief History of Particle Physics*  
Public lecture at *International Schools for Theoretical & Experimental Physics* (iS-TEP), Shanghai Jiao-Tong University, China, June 30, 2017.
45. *Phenomenology and Collider Physics*  
Nine-hour lectures at *2017 Summer School for Contemporary Particle Physics*, University of Chinese Academy of Science, Beijing, China, July 17–21, 2017.
46. *The Quest for Mass*  
Public Lecture at the Kavli Institute for Theoretical Sciences, Beijing, Sept. 28, 2017.
- 2018:
47. *Collider Physics*  
Three-hour lectures at the 5<sup>th</sup> Chilean School of High Energy Physics, Valparaiso, Jan. 15-19, 2018.
48. *The Higgs Boson and Beyond*  
Lecture at the 2018 CTEQ Summer School, University of Puerto Rico-Mayaguez, June 27, 2018.
49. *Collider Physics*  
Four-hour lectures at the Mainz summer school, Mainz Institute of Theoretical Physics, July 16–19, 2018.
50. *Collider Physics*  
Three-hour lectures at the XinJiang-IMP HEP Summer School, Lanzhou University, Aug. 2–3, 2018.
- 2019:
51. *The Quest for Nature – Fifty Years of Discoveries in HEP*  
Public Lecture at IAS, Hong Kong University of Science and Technology, Jan. 22, 2019.
52. *The Quest for Nature – Fifty Years of Discoveries in HEP*  
The 22<sup>nd</sup> Centennial Lecture at Peking University, April 25, 2019.
53. *Quest for Nature: Fifty years of Discoveries in HEP*  
Guest lecture at the Centennial Anniversary of Nankai University, Tianjin, June 17, 2019.
54. *Majorana Neutrinos: From mesons to the LHC*  
Lecture at the SLAC Summer Institute 2019, SLAC, Aug. 21, 2019.
55. *Physics Beyond the Standard Model: Under the Higgs Lamppost*  
Three-hour lectures at the ITP-KIT Retreat, Hohenwart, Germany, Sept. 25–27, 2019.
- 2020:
56. *Fifty Years of Discoveries in High-Energy Physics*  
Public Lecture (virtual on-line) at *the 6<sup>th</sup> All-China LHC Physics Conference*, Tsinghua University, Beijing, Nov. 6, 2020.

## (7). Conferences And Workshops Attended

### **1987:**

May 1987: *From Colliders to Supercolliders*, UW-Madison, Wisconsin

### **1988:**

July 1988: *High Energy Physics in the 1990's*, Snowmass, Colorado

Nov. 1988: *Beyond the Standard Model*, Iowa State University, Ames, Iowa

### **1989:**

Feb. 1989: *2<sup>nd</sup> International Symposium on the 4th Family of Quarks and Leptons*, Santa Monica, California

June 1989: *Collider Phenomenology*, Argonne National Laboratory

June 1989: *Heavy Quark Physics*, Cornell University, Ithaca, New York

Aug. 1989: *Physics at Fermilab in the 1990's*, Breckenridge, Colorado

### **1990:**

Feb. 1990: *B Physics at Fixed Target Experiments*, Fermi National Accelerator Laboratory

April 1990: *Z Phenomenology Symposium*, UW-Madison, Wisconsin

June 1990: *High Energy Physics in the 1990's*, Snowmass, Colorado

### **1991:**

Feb. 1991: *SSC Physics Symposium*, UW-Madison, Wisconsin

July 1991: *Higgs/Electroweak Symmetry Breaking Workshop*, UC-Davis, California

Aug. 1991: *APS/DPF 1991 Meeting*, Vancouver, Canada

Nov. 1991: *Many Aspects of Neutrino Physics*, Fermilab

### **1992:**

April 1992: *SSC Physics Symposium*, UW-Madison, Wisconsin

Aug. 1992: *XXVI International Conference on High Energy Physics*, Dallas, Texas

Nov. 1992: *High Energy Physics with Colliding Beams II, Studies of Top Quarks*, Madison, Wisconsin

Nov. 12-14, 1992: *APS/DPF 1992 Meeting*, Fermilab, Illinois

Dec. 11-12, 1992: *High Energy Physics with Colliding Beams III, Electroweak Symmetry Breaking*, Santa Cruz, California

### **1993:**

March 29-31, 1993: *SSC Physics Symposium*, UW-Madison, Wisconsin

April 26-30, 1993: *2<sup>nd</sup> International Workshop on Physics and Experiments with Linear  $e^+e^-$  Colliders Program*, Hawaii

May 21-22, 1993: *Tutorial Meeting on Structure Functions and Related QCD Issues*, UC-Davis, California

June 3-5, 1993: *Workshop on Physics at Current Accelerators and the Supercollider*, Argonne National Laboratory, Illinois

Aug. 10-15, 1993: *Lepton and Photon Interactions: XVI International Symposium*, Ithaca, New York

**1994:**

Feb. 2-4, 1994: *Meeting of the CMS Collaboration*, UCLA, California

Feb. 25, 1994: *Workshop on Electroweak Symmetry Breaking and TeV-Scale Physics*, UC-Santa Barbara, California

March 28-31, 1994: *Workshop on Gamma-Gamma Colliders*, Lawrence Berkeley Laboratory, California

April 11-13, 1994: *Physics Doesn't Stop: Recent Developments in Phenomenology*, UW-Madison, Wisconsin

Aug. 1-7, 1994: *APS/DPF 1994 Meeting*, Univ. of New Mexico, Albuquerque, New Mexico

Nov. 17-19, 1994: *Physics Potential and Development of  $\mu^+\mu^-$  Colliders*, Sausalito, California

Dec. 13-18, 1994: *Beyond the Standard Model IV*, Granlibakken, Lake Tahoe, California

**1995:**

Feb. 1-3, 1995: *International Symposium on Vector Boson Self-Interactions*, UCLA, California

Feb. 6-8, 1995: *Topics in Particle Physics with CMS*, UCLA, California

May 25-26, 1995: *Workshop on Particle Theory and Phenomenology*, Iowa State University, Ames, Iowa

June 21-23, 1995: *Study Group Meeting on Future  $e^+e^-$  Collider physics*, Estes Park, Colorado

Aug. 4-9, 1995: *1<sup>st</sup> Joint Meeting of the Chinese Physical Societies*, Shantou University, Guangdong, China

Aug. 10-15, 1995: *Lepton and Photon Interactions: XVII International Symposium*, Beijing, China

Sept. 25-29, 1995: *CMS Week*, Granlibakken, Lake Tahoe, California

Nov. 16-18, 1995: *Physics with High Energy  $e^+e^-$  Colliders*, Fermilab, Batavia, Illinois

Dec. 13-16, 1995: *3<sup>rd</sup> International Conference on Physics Potential and Development of  $\mu^+\mu^-$  Colliders*, San Francisco, California

**1996:**

Feb.29-Mar.2, 1996: *Physics With High Energy  $e^+e^-$  Colliders*, SLAC, California

March 28-30, 1996: *High Energy Physics at the LHC*, Fermilab, Batavia, Illinois  
April 1-3, 1996: *Pheno 96: Recent Developments in Phenomenology*, Madison, Wisconsin  
June 25-July 12, '96: *New Directions for High Energy Physics*, Snowmass, Colorado  
July 22-27, 1996: *TeV Scale Physics*, CCAST, Beijing, China  
Dec. 8-13, 1996: *The Higgs Puzzle*, Ringberg Castle, Munich, Germany

**1997:**

Feb. 19-21, 1997: *Flavor Changing Neutral currents '97*, Santa Monica, California  
Mar. 13-15, 1997: *Very-Large-Hadron-Collider Workshop*, Fermilab, Batavia, Illinois  
Mar. 17-19, 1997 *Recent Developments in Phenomenology-97*, Madison, Wisconsin  
April 29-May 4, 1997: *Beyond the SM - V*, Balholm, Norway  
Aug. 4-23, 1997: *Workshop on LEP-2 and Tevatron Physics*, Aspen Center for Physics, Aspen, Colorado  
Sept. 22-24, 1997: *Workshop for Physics at  $e^-e^-$  Colliders*, UC-Santa Cruz, California  
Oct. 31-Nov. 2, 1997: *Pacific Particle Physics Phenomenology*, Seoul, Korea  
Nov. 6-9, 1997: *Physics at the First Muon Collider and at the Front End of the Muon Collider*, Fermilab, Batavia, Illinois  
Dec. 10-12, 1997: *the 4th International Conference on Physics Potential and Development of  $\mu^+\mu^-$  Colliders*, San Francisco, California

**1998:**

March 5, 1998: *MSSM/SUGRA Working Group meeting for Physics at the Tevatron Run II Workshop*, Fermilab, Batavia, Illinois  
March 20-22, 1998: *Supersymmetry/Higgs Working Group meeting for Physics at the Tevatron Run II Workshop*, Fermilab, Batavia, Illinois  
March 23-25, 1998: *Pheno-CTEQ Joint Symposium*, UW-Madison, Wisconsin  
May 14-16, 1998: *Supersymmetry/Higgs Working Group meeting for Physics at the Tevatron Run II Workshop*, Fermilab, Batavia, Illinois  
July 6-18, 1998: *Workshop on Strong Dynamics*, Aspen Center for Physics, Aspen, Colorado  
July 23-29, 1998: *The 29th International Conference on High-Energy Physics (ICHEP 98)*, Vancouver, Canada  
Sept. 26-29, 1998: *Workshop on Physics and Detectors for Future  $e^+e^-$  Linear Colliders*, Keystone, Colorado  
Oct. 16-18, 1998: *Thinkshop: Top-quark Physics at Tevatron Run-II*, Fermilab, Illinois

**1999:**

January 17-23, 1999: *1999 Aspen Winter Conference on Particle Physics*, Aspen, Colorado



Feb. 6-12, 1999: *X<sup>th</sup> JORGE ANDRE SWIECA SUMMER SCHOOL*, Aguas de Lindoia, Brazil

April 12-14, 1999: *Pheno 99: Phenomenology for the Third Millennium*, UW-Madison, Wisconsin

April 28-May 5, 1999: *4<sup>th</sup> Workshop on Linear Collider Physics*, Sitges, Barcelona, Spain

June 14-19, 1999: *SUSY99: 7<sup>th</sup> International Conference on Supersymmetries in Physics* Fermilab, Illinois

June 28-30, 1999: *1<sup>th</sup> Annual Meeting of the Very Large Hadron Collider*, Monterey, California

July 5 - 9, 1999: *Workshop for Physics at Future Linear Colliders*, the China Center of Advanced Science and Technology (CCAST), Beijing, China

Dec. 10-16, 1999: *PASCOS 99*, Granlibakken Conference Center, Tahoe city, California

Dec. 15-17, 1999: *5<sup>th</sup> International Conference on Physics Potential and Development of  $\mu^+ \mu^-$  Colliders*, San Francisco, California

**2000:**

Mar. 13-18, 2000: *XXXV Rencontres de Moriond, Electroweak Interactions and Unified Theories*, Les Arcs, France

Apr. 24-May 12, 2000: *Theoretical Institute on SUSY and Higgs 2000*, Argonne National Lab, Argonne, Illinois

June 26-July 1, 2000: *SUSY2K: 8th International Conference on Supersymmetries in Physics*, CERN, Geneva, Switzerland

July 3-6, 2000: *Beyond4D: Conference on Physics Beyond Four Dimensions*, ICTP, Trieste, Italy

Aug. 21-Sept.3, 2000: *Workshop on New Physics at the Weak Scale and Beyond*, Aspen Center for Physics, Aspen, Colorado

Sept. 18-20, 2000: *Identification of Dark Matter 2000*, York, England

Sept. 20-22, 2000: *European Heavy Flavor Workshop*, University of Durham, England

Oct. 13-15, 2000: *International Symposium: SUSY 30 Years*, University of Minnesota

Oct. 24-28, 2000: *International Linear Collider workshop 2000*, Fermilab, Illinois

Dec. 17-23, 2000: *Workshop on the CERN Large Hadron collider*, the China Center of Advanced Science and Technology (CCAST), and the Institute of Theoretical Physics (ITP), Beijing, China

**2001:**

May 3-5, 2001: *Higgs Physics Workshop*, Fermilab, Illinois

May 7-9, 2001: *Pheno Symposium 2001*, Madison, Wisconsin

June 11-17, 2001: *International Symposium on SUSY, 2001*, Dubna, Russia

June 30-Jul.21, 2001: *DPF Snowmass Workshop*, Snowmass, Colorado

Jul.30-Aug.3, 2001: *Workshop on TeV Scale Physics*, the China Center of Advanced Science and Technology (CCAST), Beijing, China

**2002:**

Jan. 7-9, 2002: *US Linear Collider workshop*, University of Chicago

Jan. 11-13, 2002: *The Peccei Fest*, University of California, Los Angeles

April 22-24, 2002: *Pheno Symposium 2002*, Madison, Wisconsin

May 24-28, 2002: *APS/DPF 2002 Meeting*, Coll. William & Mary, Williamsburg, Virginia

June 17-23, 2002: *International Symposium on SUSY, 2002*, DESY, Hamburg

July 6-11, 2002: *The 1<sup>st</sup> String Phenomenology conference*, Oxford University, England

**2003:**

Jan. 9-11, 2003: *American Linear Collider Workshop*, The University of Texas–Arlington, Texas

Jan. 20-24, 2003: *Aspen Winter Conference*, Aspen Center for Physics, Colorado

March 17-18, 2003: *Physics at Future Colliders*, Kyoto, Japan

Mar.31-Apr.18, 2003: *Neutrino Physics Workshop*, The University of California–Santa Barbara.

May 5-7, 2003: *Pheno Symposium 2003*, Madison, Wisconsin

May 19-24, 2003: *Conference on Interface of Particle, Astrophysics and Nuclear Physics*, Manhattan, New York

July 20-Aug.2, 2003: *Aspen Summer workshop on Flavor Physics*, Aspen, Colorado

Oct. 6-11, 2003: *International Conference on Flavor Physics*, Seoul, Korea

Oct. 16-18, 2003: *International Workshop on Future Hadron Colliders*, Fermilab, Chicago

**2004:**

Jan. 7-11, 2004: *Conference on Interplay of High Energy Physics, Nuclear Physics, and Cosmology*, Harbin, P.R. China

Jan. 13-15, 2004: *International workshop on  $\tau$  and charm Physics*, Beijing, P.R. China

May 2-4, 2004: *Pheno Symposium 2004*, Madison, Wisconsin

June 19-23, 2004: *SUSY2004*, Tsukuba, Japan

June 15-28, 2004: *Physics Beyond the Standard Model*, Puebla, Mexico

July 5-9, 2004: *the International Conference on Frontier Physics*, Beijing, P.R. China

Sept. 16-18, 2004: *The 1<sup>st</sup> Meeting for TeV<sub>4</sub>LHC Workshop*, Fermilab

Dec. 14, 2004: *TeV<sub>4</sub>LHC Higgs working group meeting*, Fermilab

**2005:**

Feb. 3-5, 2005: *The 2<sup>nd</sup> Meeting for TeV<sub>4</sub>LHC*, Brookhaven National Lab.

April 28-30, 2005: *The 3<sup>rd</sup> Meeting for TeV<sub>4</sub>LHC*, CERN  
April 27-31, 2005: *DIS 2005: XIII International Workshop on DIS*, Madison, Wisconsin  
May 2-4, 2005: *Pheno Symposium 2005*, Madison, Wisconsin  
May 14-27, 2005: *Physics Beyond the Standard Model*, Puebla, Mexico  
July 15-20, 2005: *Physics at  $e^+e^-$  Linear Colliders*, Beijing, China  
Aug.15-Aug.28, 2005: *Workshop on International Linear Collider*, Snowmass, Colorado  
Aug.15-Sept.9, 2005: *Workshop on Collider Physics*, Aspen, Colorado  
Oct.20-22, 2005: *TeV<sub>4</sub>LHC Concluding Meeting*, Fermilab

**2006:**

Feb. 9-10, 2006: *LHC Olympics*, CERN.  
April 12-15, 2006: *LHC Inverse Problem Workshop*, Ann Arbor, Michigan.  
May 8, 2006: *The Langacker Fest*, The University of Pennsylvania, Philadelphia.  
May 9-10, 2006: *Argonne/U. Chicago Collider Workshop*, Argonne National Lab.  
May 15-17, 2006: *Pheno Symposium 2006*, Madison, Wisconsin  
June 12-17, 2006: *SUSY-06*, University of California-Irvine.  
July 31-August 26, 2006: Aspen 2006 summer workshop, *Particle Theory in the Anticipation of the LHC*, Aspen, Colorado.  
Sept.25-29, 2006: *Asian School of Particle, String and Cosmology*, Nasu, Japan.  
Nov.12-16, 2006: *National School of LHC Physics*, Weizmann InstitutNasue and Technion, Israel.  
Dec.4-7, 2006: *International Linear Collider: Physics Opportunities*, Fragrant Hill, Beijing, China

**2007:**

Jan.19-20, 2007: *The Kane Fest*, The University of Michigan, Ann Arbor.  
Feb.4-8, 2007: *ACFA and ILC GDE Joint Workshop*, IHEP, Beijing, China.  
March 21-23, 2007: *Princeton Joint LHC Workshop*, Princeton University.  
April 12-14, 2007: *The Early Phase of the LHC for the ILC*, Fermilab.  
May 7-9, 2007: *Pheno Symposium 2007: Prelude to the LHC*, Madison, Wisconsin  
May 26, 2007: *International Conference on Frontier Physics*, KITP-C, Beijing, China.  
Oct. 20, 2007: *Neutrino masses and the TeV scale physics*, Triumph, Canada.

**2008:**

Feb.18-April 18, 2008: *Workshop on Physics of the LHC*, KITP, Santa Barbara.  
April 28-30, 2008: *Pheno Symposium 2008: LHC Turns On*, Madison, Wisconsin  
July 8-12, 2008: *Wei-Hai Forum*, Wei-Hai, China.

July 14-25, 2008: *Workshop on BSM and Flavor physics*, KITPC, China.

Oct. 20-25, 2008: *Conference on Going beyond the SM, Marching into the LHC era*, KITPC, China.

**2009:**

Feb. 8-14, 2009: *LHC to Future Colliders*, CERN, Geneva.

March 9-14, 2009: *Yukawa Symposium*, YITP, Kyoto University, Japan.

March 16-20, 2009: *LHC Focus Week: Mass and Spin Measurements*, IPMU, Tokyo University, Japan.

April 1-4, 2009: *UC-Davis Workshops on Mass and Spin Measurements and MC4BSM*, UC-Davis, California.

May 11-13, 2009: *Pheno Symposium 2009: LHC Alive!* Madison, Wisconsin.

May 18-22, 2009: *Particle Physics and Cosmology 09*, Univ. of Oklahoma, Norman.

June 2-4, 2009: *Beyond the Standard Model at the LHC-2009*, Northeastern University, Boston.

July 22-25, 2009: *Innovative Team Meeting*, Shandong University, Wei-Hai, China.

Nov. 10-12, 2009: *Workshop on Physics, Detector and Accelerator at Muon Colliders*, Fermilab.

Dec. 14-15, 2009: *Quigg Fest*, in honor of Chris Quigg, Fermilab.

**2010:**

March 26-30, 2010: *International Linear Collider Workshop 2010*, Beijing, China.

May 13-15, 2010: *MCTP Spring Symposium on Higgs Boson Physics*, Ann Arbor, Michigan.

May 31-June 4, 2010: *The 3<sup>rd</sup> International Workshop on Top Physics: Top-2010*, Bruges, Belgium.

June 9-12, 2010: *GoranFest*, in honor of Goran Senjenovic, Split, Croatia.

June 27-July 11, 2010: *Workshop on The Dark Side of the Universe*, Aspen, Colorado.

Aug. 22-24, 2010: *New Physics at the LHC*, Tsinghua University, China.

Sept. 22-25, 2010: *SLAC Workshop on Topologies for Early LHC Searches*, Stanford National Linear Accelerator Lab., California.

Dec. 6-10, 2010: *Kruger 2012: Discovery Physics at the LHC*, Kruger National Park, South Africa,

**2011:**

Jan. 25-27, 2011: *LHC Symposium*, National Taiwan University, Taiwan.

Jan. 28-29, 2011: *Deep Underground Physics Workshop*, ChengDu/Jin-Ping Mountain, Si-Chuan University, China.

May 9-11, 2011: *Phenomenology 2011 Symposium*, University of Wisconsin, Madison.

May 12-14, 2011: *LoopFest X: Uli Baur Memorial*, Northwestern University.

June 1-3, 2011: *Shanghai Particle physics, Cosmology Workshop*, Shanghai JiaoTong University. China.

June 3-6, 2011: *Particle Physics Phenomenology Workshop IX*, National Central University, Taiwan.

June 27-29, 2011: *Workshop on Muon Collider Physics*, Telluride, Colorado.

June 26-July 9, 2011: *Workshop on Year one of the LHC*, Aspen, Colorado.

August 9-13, 2011: *APS/DPF Meeting*, Brown University, Providence, Rhode Island.

Sept. 22-24, 2011: *2011 International Workshop on Baryon and Lepton Number Violation*, Great Smokey Mountains, Gatlinburg, Tennessee.

Oct. 14-15, 2011: *Lattice Meets Experiments*, Fermilab, Illinois.

**2012:**

Feb. 22-25, 2012: *2012 Lake Louise Winter Institute*, Lake Louise, Alberta, Canada.

March 17-18, 2012: *The SEARCH Workshop 2012*, University of Maryland, College Park.

May 3-5, 2012: *Chicago 2012 Workshop on LHC Physics*, University of Chicago.

May 7-9, 2012: *Phenomenology 2012 Symposium: LHC Lights The Way*, University of Pittsburgh.

May 10-12, 2012: *LoopFest XI*, University of Pittsburgh.

May 14-16, 2012: *The Next Stretch of the Higgs Magnificent Mile*, Northwestern University/Argonne Lab, Chicago.

May 28-June 1, 2012: *Rencontres de Blois*, Blois, France.

June 3-9, 2012: *XXV International Conference on Neutrino Physics and Astrophysics (Neutrino 2012)* Kyoto, Japan.

June 18-July 6, 2012: *Workshop on The First Two Years at the LHC*, KITP-China, Beijing.

July 16-20, 2012: *CETUP\* 2012*, Sanford Underground Research Facilities, South Dakota

July 22-Aug.4, 2012: *Workshop on the LHC Shows the Way*, Aspen, Colorado.

August 13-18, 2012: *The 20<sup>th</sup> International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY2012)*, Peking University, Beijing, China,

October 19-21, 2012: *PITT PACC Workshop: The Higgs Boson and the Next Discovery*, University of Pittsburgh.

November 12-14, 2012: *The 2012 TeV-Scale Physics Workshop*, Tsinghua University, Beijing, China.

November 14-16, 2012: *The ICFA beams dynamics workshop on Higgs Factories*, Fermilab.

Dec. 16-22, 2012: *Workshop on Higgs Physics at the LHC*, KITP, Santa Barbara.

**2013:**

Jan. 3-5, 2013: *Haber-Dine Fest*, Santa Cruze, California.

Jan. 14-15, 2013: *Higgs Snowmass Workshop at Princeton*, Princeton University

February 11-13, 2013: *PITT PACC Workshop: Beyond  $\theta_{13}$* , University of Pittsburgh.

March 8-10, 2013: *TAMU Workshop on Dark Matter*, Texas A&M University, College Station, Texas

April 22-26, 2013: *The LHC Higgs Signal: Characterization, Interpretation and BSM Model Implications*, University of California-Davis

May 6-8, 2013: *Phenomenology 2013 Symposium*, University of Pittsburgh.

June 13-14, 2013: *International Workshop on "RENO-50" toward Neutrino Mass Hierarchy*, Seoul National University, Korea

June 24-29, 2013: *The 26<sup>th</sup> International Symposium on Lepton Photon Interactions at High Energies*, SLAC, San Francisco, California.

July 7-17, 2013: *CTEQ Summer School*, University of Pittsburgh.

July 29-Aug. 6, 2013: *Snowmass on the Mississippi: Community Summer Study 2013*, University of Minnesota, Minneapolis.

Aug. 15-16, 2013: *International Symposium on Higgs Physics*, IHEP, Beijing, China.

Aug. 22-24, 2013: *The 8th TeV Physics Working Group Workshop*, Dalian, China.

Sept. 13-14, 2013: *Kickoff Meeting for the CEPC/SppC Program*, IHEP, Beijing, China

Sept. 30 - Oct. 2, 2013: *Workshop on the Anomalous Quartic Gauge Boson Couplings*, Dresden, Germany.

Oct. 3-5, 2013: *From Majorana to LHC*, ICTP, Trieste, Italy.

Nov. 11-12, 2013: *SM(at)New Energy Frontier*, FNAL, Illinois.

Nov. 18-19, 2013: *PITT PACC Workshop: Determining the Next Scale in High Energy Physics*, University of Pittsburgh.

Dec. 16-17, 2013: *Workshop on Future High Energy Circular Colliders*, Beijing, China.

**2014:**

Jan. 18-24, 2014: *Aspen Winter Conference 2014*, Aspen, Colorado.

Feb. 5-9, 2014: *ATLAS Exotic Physics Working Group Open Meeting*, Eilat, Israel.

Feb. 10-11, 2014: *VLHC Theory Kickoff Meeting*, CERN, Geneva, Switzerland.

Feb. 13-15, 2014: *CERN Future Circular Collider Kickoff Meeting*, Univ. of Geneva, Switzerland.

Feb. 23-25, 2014: *The 1<sup>st</sup> CFHEP Symposium on Circular Collider Physics*, IHEP, Beijing, China.

April 8 - 11, 2014: *SM(at)LHC, 2014*, Madrid, Spain.

May 5-7, 2014: *Phenomenology 2014 Symposium*, University of Pittsburgh.

Aug. 11-15, 2014: *The 2<sup>nd</sup> CFHEP Symposium on Circular Collider Physics*, IHEP, Beijing, China.

Sept. 8-10, 2014: *The Annual Conference of Chinese Physical Society*, Harbin Institute of Technology, Harbin, Heilongjiang Province, China.

Sept. 11-12, 2014: *Working Group Meeting for Circular  $e^+e^-$  Collider*, Shanghai Jiao-Tong University, Shanghai, China.

Dec. 15-17, 2014: *The UK Christmas Meeting*, IPPP, Durham, UK.

**2015:**

Jan. 3-11, 2015: *Future High Energy Physics*, IAS, Hong Kong University of Science and Technology.

Jan. 26-Feb. 1, 2015: *Exploring the Physics Frontier with Circular Colliders*, Aspen Center for Physics.

March 9-10, 2015: *Workshop on CEPC Precision Physics*, ITP, Beijing, China

March 25-26, 2015: *Key Aspects in Exploring Road to Unification: KAERU Conference*, IPMU, Japan.

March 27, 2015: *MadGraph Collaboration Meeting*, IPMU, Japan.

April 11-17, 2015: *APS April Meeting, Neutrino Session*, Baltimore, Maryland.

April 20-24, 2015: *MCTP Spring Higgs Symposium*, University of Michigan, Ann Arbor.

May 4-6, 2015: *Phenomenology 2015 Symposium*, University of Pittsburgh.

June 7-12, 2015: *Gordon Research Conference*, Hong Kong University of Science and Technology.

July 7-17, 2015: *CTEQ Summer School*, University of Pittsburgh.

July 27-31, 2015: *Chinese HEP Summer School*, University of Chinese Academy of Sciences.

Aug. 1-7, 2015: *Asian Summer Institute*, Huai-Rou campus at the University of Chinese Academy of Sciences.

Aug. 8-9, 2015: *The 10<sup>th</sup> Workshop for the Chinese TeV-Scale Physics working Group*, Huai-Rou campus at the University of Chinese Academy of Sciences.

Aug. 10-12, 2015: *DOE-IHEP Joint workshop on Physics of CEPC*, IHEP, Beijing, China.

Aug. 12-14, 2015: *International Summer School on TeV Experimental Physics (iSTEP)*, ShanDong University, China

Aug. 17-20, 2015: *SLAC Summer Institute on Neutrino Physics*, SLAC, Palo Alto, California.

Aug. 18-22, 2015: *pre-SUSY Symposium*, UC-Davis, Davis, California.

Aug. 31-Sept. 5: *Large Hadron Collider Conference*, St. Petersburg, Russia.

Oct. 7-9, 2015: *Brookhaven Forum 2015: Great Expectations, A New Chapter*, Brookhaven National Lab, Long Island, USA.

Oct. 22-23, 2015: *Annual Conference of Korean Physical Society*, Gyeongju, Korea.

Nov. 9-13, 2015: *KIAS-CFHEP Workshop and the 5th KIAS Workshop on Particle Physics and Cosmology*, KIAS, Seoul, Korea.

Dec. 9-12, 2015: *National Center for Theoretical Science Annual Theory Meeting*, National Tsinghua University, Taiwan.

**2016:**

Jan. 18-21, 2016: *IAS Program on High Energy Physics 2016*, Institute for Advanced Study, Hong Kong.

May 9-11, 2016: *Phenomenology 2016 Symposium*, University of Pittsburgh.

May 20, 2016: *CUNY Symposium on Quantum Fields*, New York City.

June 3, 2016: *Aus Anlass des 60. Geburtstages von Herrn Prof. Dr. Dieter Zeppenfeld*, Karlsruhe Institute of Technology, Germany.

June 5-18, 2016: *Multiple Faces for Naturalness*, Aspen, Colorado.

July 10-Aug. 6, 2016: *Workshop on Physics at the LHC Run 2 and International Conference on Frontiers of Science on "Quantum Cosmo-Physics"*, KITPC, Beijing, China.

July 12-13, 2016: *The Standard Model of Electroweak & Strong Interactions*, Tsinghua University, Beijing, China.

Aug. 15-19, 2016: *International Symposium on Higgs & Beyond*, Shandong University, Weihai, China.

Aug. 24-26, 2016: *Multiple Boson Interaction 2016*, Madison, Wisconsin.

Aug. 31-Sept. 2, 2016: *SEARCH 2016*, Oxford University, UK.

Oct. 16-18, 2016: *Search for new physics through the Higgs boson*, Gwangju, Korea.

Oct. 19-20, 2016: *Fragrant Hill Forum*, Fragrant Hill Hotel, Beijing, China.

Nov. 26-30, 2016: *Inauguration of T. D. Lee Institute*, Shanghai Jiao-Tong University, Shanghai, China.

Dec. 5-10, 2016: *National Center for Theoretical Science Annual Meeting*, National Tsinghua University, Taiwan.

**2017:**

March 19-25, 2017: *From the LHC to Dark Matter and Beyond*, Aspen Center for Physics, Aspen, Colorado.

March 27-31, 2017: *Neutrinos: the quest for a new physics scale*, CERN, Geneva.

April 5-7, 2017: *New physics interpretation for LHC data*, Argonne National Lab.

May 8-10, 2017: *Phenomenology 2017 Symposium*, University of Pittsburgh.

May 22-26, 2017: *Particle Physics and Cosmology 2017*, Texas A&M-Corpus Christi.

June 7, 2017: *Fermilab at 50*, Fermilab, Chicago.



June 12–20, 2017: *The TeV Scale: A Threshold to New Physics?*, MITP, Mainz, Germany.

June 21–23, 2017: *PASCOS 2017*, IFT, Madrid, Spain.

June 25–29, 2017: *Gordon Research Conference*, HKUST, Hong Kong.

June 29–July 1, 2017: *International Summer School on TeV Experimental Physics (iS-TEP)*, Shanghai Jiao-Tong University, China.

July 22–24, 2017: *The 12<sup>th</sup> Workshop for the Chinese TeV-Scale Physics working Group*, Zhengzhou, China.

Aug. 1–3, 2017: *National Center for Theoretical Science Annual Theory Meeting*, National Tsinghua University, Taiwan.

Aug. 10–11, 2017: *Summer school on neutrino physics*, Fermilab, USA.

Sept. 14–19, 2017: *Director inauguration and Dark Matter Workshop at T. D. Lee Institute*, Shanghai Jiao-Tong University, Shanghai, China.

Oct. 7–9, 2017: *HenryFest: HenryFest: Tying Particles and Strings to the Cosmos*, Cornell, Ithaca.

Oct. 20–22, 2017: *The Light Dark World*, workshop at PITT PACC, Pittsburgh.

Nov. 12–18, 2017: *LHC Chapter II: The Run for New Physics*, International Institute of Physics, Natal, Brazil.

## **2018:**

Jan. 12, 2018: *The 5<sup>th</sup> Chilean School of High Energy Physics*, Universidad Tecnica Federico Santa Maria, Chile.

March 25–31, 2018: *2018 Aspen Winter Conference*, Aspen Center for Physics, Colorado.

April 6, 2018: *HL-LHC/HE-LHC Workshop*, Fermilab.

April 14–17, 2018: *American Physical Society April Meeting*, Columbus, Ohio.

May 7–9, 2018: *Phenomenology 2018 Symposium*, University of Pittsburgh.

May 22–26, 2018: *PLANCK 2018*, University of Bonn, Germany.

June 1–3, 2018: *SM at 50*, Case Western Reserve University, Cleveland.

June 4–7, 2018: *PASCOS 2018*, Case Western Reserve University, Cleveland.

Aug. 12–17, 2018: *Asian Summer Institute*, Panshan, Tianjin, China.

Aug. 18–20, 2018: *The 13<sup>th</sup> Workshop for the TeV-Scale Physics Working Group*, Tianjin, China.

Sept. 29–Oct. 4, 2018: *IPMU-IPPP Workshop, Beyond BSM*, Ikaho, Gumma prefecture, Tenbo Hotel, Japan.

Oct. 22–26, 2018: *International Linear Collider Workshop*, Arlington, Texas.

Nov. 4–10, 2018: *Neutrino Theory Network Workshop*, Pitt PACC, Pittsburgh.

Nov. 26–29, 2018: *Higgs Couplings 2018*, Ryogoku Tokyo, Japan.

**2019:**

Jan. 9–14, 2019: *DCPIHEP 2019 Workshop*, Comala, Colima, Mexico.

Jan. 19–24, 2019: *Workshop on Physics for Future Colliders*, Hong Kong University of Science and Technology.

Jan. 21–22, 2019: APS Leadership Convocation, Washington DC.

Feb. 2–March 2, 2019: *Workshop BSM Circa 2020*, Pitt PACC, Pittsburgh.

March 24–30, 2019: *2019 Aspen Winter Conference*, Aspen Center for Physics, Colorado.

April 13–16, 2019: *American Physical Society April Meeting*, Denver, Colorado.

April 20–23, 2019: *The 14<sup>th</sup> Workshop for the TeV-Scale Physics Working Group*, Nanjing, China.

May 6–8, 2019: *Phenomenology 2019 Symposium*, University of Pittsburgh.

May 14–15, 2019: *Mitchell Conference on Collider, DM, Neutrino Physics – In honor of Dimitri Nanopoulos*, College Station, Texas.

May 20–24, 2019: *27<sup>th</sup> International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2019)*, Texas A&M University-Corpus Christi.

May 28–31, 2019: *Neutrino Theory Network Workshop on Neutrino NSI*, Washington University, St. Louis.

June 9–11, 2019: *2<sup>nd</sup> Frontier Forum on Particle Physics*, Sichuan University, Chengdu, China.

June 29–July 6, 2019: *Gordon Research Conference in Particle Physics*, Hong Kong University of Science and Technology, Hong Kong.

July 16–26, 2019: *CTEQ Summer School*, University of Pittsburgh.

July 17–19, 2019: *QCD at the LHC 2019*, University at Buffalo, SUNY.

July 29–Aug. 2, 2019: *DPF Meeting*, Northeastern University, Boston.

Aug. 5–18, 2019: *ACP program on dark matter and collider physics*, Aspen Center for Physics, Aspen.

Sept. 16–18, 2019: *International Workshop on the Circular Electron-Positron Collider*, University of Chicago.

Sept. 25–27, 2019: *ITP-KIP Retreat*, Karlsruhe Institute of Technology, Germany.

Oct. 5–11, 2019: *Neutrino Platform Week 2019: Hot Topics in Neutrino Physics*, CERN, Geneva.

Dec. 10–15, 2019: *The NCTS Annual Theory Meeting*, National Tsing-Hua University, Taiwan.

**2020:**

Feb. 13–16, 2020: *AAAS Annual Meeting*, Seattle.

April 18–21, 2020: *APS April Meeting 2020 (virtual)*, Washington DC.

April 22, 2020: *International Workshop on the Circular Electron-Positron Collider (virtual)*, The Catholic University of America, Washington DC.

May 4–6, 2020: *Phenomenology 2020 Symposium (virtual)*, University of Pittsburgh.

May 25–29, 2020: *RECONNECT (virtual)*, IPPP, Durham University, UK.

June 22–27, 2020: *NEUTRINO 2020 (virtual)*, Fermilab.

June 29–July 2, 2020: *Neutrino Theory Overtime (virtual)*, Fermilab.

July 6–8, 2020: *BLV Circa 2020 (virtual)*, Case Western Reserve University, Cleveland.

Oct. 5–8, 2020: *Snowmass Community Preparation Meeting (CPM-virtual)*, Fermilab.

Oct. 26–30, 2020: *Higgs 2020 (virtual)*, Osaka University, Japan.

Dec. 10, 2020: *Muon Collider Exploration (virtual)*, University of Wisconsin-Madison.

## (8). Other Recent Professional Activities and Community Service

### Professional Community Service

- American Physical Society Division of Particles and Fields Chair line: Vice Chair (2019), Chair-elect (2020), Chair (2021), Past Chair (2022).
- American Physical Society annual April Meeting Program Committee Chair line: Vice Chair (2018, Columbus), Chair-elect (2019, Denver), Chair (2020, Washington DC, the 1<sup>st</sup> virtual meeting), Past Chair (2021, Sacramento).
- APS DPF Steering group for Snowmass Studies: 2019–2022; Chair 2021.

### Professional Journal Service

- Co-Editor for *European Physics Letters*, 2012-2015.
- Editorial Board for *Journal of Physics G*, Institute of Physics, 2011-2014.
- Editorial Board for *Physical Review D*, 2008-2010.
- Co-Editor for a special issue in *Advances in High Energy Physics*, 2012.

### Advisory Board and Panel Service

- Steering Committee for the Institute for Particle Physics Phenomenology (IPPP), Durham University, UK, 2019–2022.
- National lab KEK Science Advisory Committee, Japan, 2019–present.
- National Advisory Board for Kavli Institute for Theoretical Physics-China (KITP-C): member 2007–2011; Chair: 2011–2016.
- Member of HEPAP (High Energy Physics Advisory Panel), 2013–2016.
- Member of HEPAP 2021, DPF ex officio
- Member of TASI Scientific Advisory Board, 2010–2016.  
(Theoretical Advanced Study Institute, Boulder, Colorado, under NSF and DOE)

- American Physical Society Committees:  
DPF Nominating Committee (2012, 2013 Chair)  
J.J. Sakurai Prize for theoretical particle physics (2014, 2015)
- Overseas Chinese Physics Astro-physics Association (OCPA) Coordinator (HEP Division), 2006–2011.

### **Academic Review and Consulting Service**

- Member of HEPAP sub-committee on DOE Portfolio review, 2017–2018.
- Member of DOE “Committee of visitors”, Office of High Energy Physics (COV, 2016).
- Reviewer for DOE and NSF High Energy Physics Grants.
- Member of NSF “Committee of Visitors” (COV, 2012).
- Review panelist for DOE Comparative Review for Theory Proposals (2013).
- Review panelist for DOE Comparative Review for Intensity Frontier Proposals (2014).
- Review panelist for NSF Particle Physics and Cosmology Programs (2011, 2012, 2013, 2014).
- Review panelist for DOE National Lab Energy Frontier Research Program (2012).
- Review panelist for DOE National Lab Theory Groups (2011, 2014).
- Review panelist for DOE Early Career Research Program (2009, 2015).
- Theory Consultant for DOE High Energy Physics Lab evaluations (SLAC: 2004; ANL: 2005; 2007).
- Review panelist for the Science and Technology Facilities Council (STFC), UK, on the IPPP ten years grant renewal (2008).

### **Established Regular Conference Series:**

- Chair or co-chair for the annual Pheno symposia:  
*Pheno-CTEQ Symposium: Frontiers of Phenomenology* (UW-Madison, April, 1998).  
*Pheno 99 Symposium: Phenomenology for the Third Millennium* (April, 1999).  
*Pheno 2000 Symposium: Phenomenology for the  $\nu$  Century* (April, 2000).  
*Pheno 2001 Symposium* (May, 2001).  
*Pheno 2002 Symposium* (April, 2002).  
*Pheno 2003 Symposium* (May, 2003).  
*Pheno 2004 Symposium* (April, 2004).  
*Pheno 2005 Symposium: World Year of Phenomenology* (May, 2005).  
*Pheno 2006 Symposium* (May, 2006).  
*Pheno 2007 Symposium: Prelude to the LHC* (May, 2007).  
*Pheno 2008 Symposium: LHC Turn-on* (April, 2008).  
*Pheno 2009 Symposium: LHC Alive!* (May, 2009).  
*Pheno 2010 Symposium: LHC Decade!* (May, 2010).  
*Pheno 2011 Symposium:* (May, 2011).  
*Pheno 2012 Symposium: LHC Lights The Way* (U. of Pittsburgh, May, 2012).

- Pheno 2013 Symposium*, (May, 2013).
- Pheno 2014 Symposium: Full Steam Ahead!* (May, 2014).
- Pheno 2015 Symposium: LHC Run-2: Let's Go Beams* (May, 2015).
- Pheno 2016 Symposium: Forging the New Physics at the LHC* (May, 2016).
- Pheno 2017 Symposium: Building on the New Data* (May, 2017).
- Pheno 2018 Symposium: "Points of View"* (May, 2018).
- Pheno 2019 Symposium: "Physics at Different Scales"* (May, 2019).
- Pheno 2020 Symposium: "From the Infrared to the Ultra-violet"* (May, 2020).
- Pheno 2020 Symposium* (May, 2021).
- Co-organizer for PITT PACC Rapid-Response Workshops, Univ. of Pittsburgh:
    - Exploring Low-Mass Dark Matter Candidates*, Nov 14-16, 2011.
    - Light Higgs: Implications for the Search for New Physics at the LHC*, Jan. 13-15, 2012.
    - The Higgs Boson and the Next Discovery*, Oct. 19-21, 2012.
    - Determining the Next Scale in High Energy Physics*, November 18-19, 2013.
    - Probing Non-Minimal Dark Sectors*, June 8-10, 2014.
    - QCD and Beyond at Colliders*, November 13-14, 2014.
    - Higgs Boson and Beyond*, December 3-5, 2015.
    - SM at the LHC*, May 3-6, 2016.
    - Invisible Higgs at the LHC*, August 24-26, 2016.
    - The Nu-Theory workshop: Beyond the  $3 \times 3$  Paradigm*, Nov. 4-10, 2018.
    - BSM Circa 2020*, Feb. 28-March 2, 2019.
    - Physics potential for a muon collider*, Nov.30-Dec. 2, 2020.
  - PI and co-organizer for CTEQ bi-annual summer schools at Pittsburgh:
    - CTEQ-2013*, July 7-17, 2013.
    - CTEQ-2015*, July 7-17, 2015.
    - CTEQ-2017*, July 19-27, 2017.
    - CTEQ-2019*, July 16-26, 2019.
  - Co-organizer for CTEQ bi-annual summer schools outside Pittsburgh:
    - CTEQ-2007*, University of Wisconsin-Madison, May 30-June 7, 2007.
    - CTEQ-2011*, University of Wisconsin-Madison, June, 2011.
    - CTEQ-2014*, Peking University, Beijing, China, July 8-18, 2014.
    - CTEQ-2018*, Puerto Rico, June 18 -20, 2018.
  - International Advisory Board for *International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY)*
    - SUSY 2012*, (Panel Moderator), Beijing, China, August 13-18, 2012.
    - SUSY 2013*, (Higgs co-convener), ICTP, Trieste, Italy, August 26-Sept. 1, 2013.
    - SUSY 2014*, Manchester, UK, July 21-26, 2014.
    - SUSY 2015*, Lake Tahoe, California, Aug. 23-29, 2015.
    - SUSY 2016*, Melbourne, Australia, July 3-8, 2016.
    - SUSY 2017*, Mumbai, India, Dec. 11-15, 2017.
    - SUSY 2018*, Barcelona, Spain, July 23-27, 2018.
    - SUSY 2019*, Corpus Christi, Texas, May 20-24, 2019.

*SUSY 2021*, Beijing, China, 2021.

- Initiator, co-Chair for *Workshop of TeV Physics Working Group China*:  
*The 10<sup>th</sup> Workshop*: UCAS Yanxi Lake Campus, Huai-rou, China, Aug. 8–9, 2015.  
*The 12<sup>th</sup> Workshop*: ZhengZhou University, ZhengZhou, China, July 22–24, 2017.  
*The 13<sup>th</sup> Workshop*: Nankai University, Tianjin, China, Aug. 18–19, 2018.  
*The 14<sup>th</sup> Workshop*: Nanjing Normal University, Nanjing, China, April 18–21, 2019.
- Initiator, co-organizer for *CFHEP Symposia and Workshops*, IHEP, China:  
*The 1<sup>st</sup> CFHEP Symposium on Circular Collider Physics*, Feb. 23-25, 2014.  
*The 2<sup>nd</sup> CFHEP Symposium on Circular Collider Physics*, Aug. 11-15, 2014.  
*Workshop on CEPC Precision Physics*, March 9-10, 2015.  
*KIAS-CFHEP Joint Workshop on Collider Physics*, November 9-13, 2015.

### **Other Organizing, Advising, and Convening Meetings:**

- Chair-elect for the *Gordon Research Conference in Particle Physics*, 2021, Hong Kong.
- Vice Chair for the *Gordon Research Conference in Particle Physics*, 2019, Hong Kong.
- Co-Chair for the *International Symposium on Higgs Boson and Beyond*, ShanDong University, WeiHai, China, Aug. 15–19, 2016.
- Co-organizer for *Hints of New Physics at the LHC Run 2 – KITPC and TeV working group workshop*, KITPC-C/ITP, Beijing, China, July 26–28, 2016.
- International Advisory Committee for *The 10<sup>th</sup> workshop on Carlo Tools for Physics Beyond Standard Model* (MC4BSM 2016), IHEP, China, July 20–24 2016.
- Co-organizer for the KITPC-C workshop, *New Physics at the LHC Run 2*, July 11 – Aug. 5, 2016, KITPC-C/ITP, Beijing, China.
- Co-Chair for *The International Summer Institute*, UCAS Yanxi Lake Campus, Huai-rou, Aug. 1–7, 2015.
- Co-organizer for *The 6<sup>th</sup> Summer School on Frontier Theoretical Physics*, UCAS Yanxi Lake Campus, Huai-rou, July 31–August 6, 2015.
- Session Chair for *Top-quark Physics at Gordon Research Conference*, Hong Kong University of Science and Technology, June 7–12, 2015.
- International Advisory Board for *Kruger Workshops: Discovery Physics at the LHC*, Kruger National Park, South Africa, Dec. 3-7, 2012; Dec. 2014.
- Co-Chair of Program Committee for *International Symposium on Higgs Physics 2013*, IHEP, Beijing, China, August 9-16, 2012.
- Co-convenor for the *Working Group for tau's: Chicago 2012 Workshop on LHC Physics*, University of Chicago, May 3-5, 2012.
- Initiator and co-organizer for the *International conference and Summer School on LHC Physics*, TsingHua University, Beijing, August 16-24, 2010.
- International Advisory Board for *TOP2010: Conference on Top Quark Physics*, Brugge, Belgium, May 31- June 4, 2010.

- Convener for the muon collider physics working group, *Muon Collider Physics and Workshop*, Fermilab, Nov. 10-12, 2009.
- Co-convener for the Working Group, *Missing Energy*, for the *2009 Linear Collider Workshop of the Americas*, Albuquerque, New Mexico, Sept. 29–Oct. 3, 2009.
- Co-convener for the High-Energy Physics Division, *Oversea Chinese Physics Association Meeting IV*, Lanzhou, China, Aug. 3–7, 2009.
- Co-convener for the Working Group IV, *Other New Signatures Beyond the Standard Model*, The workshop of *The LHC to Future Colliders*, CERN, Feb. 9-27, 2009.
- Scientific Director for *TASI 08 (Theoretical Advanced Study Institute)*, University of Colorado, Boulder, CO., June 2-28, 2008.
- Co-convener for the Working Group IV, *Beyond the Standard Model*, The workshop of *The LHC Early Phase for the ILC*, Fermilab, April 12-14, 2007.
- Co-convener for the Working Group III, *Beyond the Standard Model*, The workshop of *The LHC Early Phase for the ILC*, Fermilab, April 12-14, 2007.
- Co-organizer for the KITP-C workshop, *Physics beyond the Standard Model*, June – Nov., 2008, KITP-C/ITP, Beijing, China.
- Co-organizer for the KITP workshop, *Physics at the LHC*, Feb.20 - June 6, 2008, University of California, Santa Babara.
- Co-organizer for the workshop, *CTEQ–2007*, May 30-June 7, 2007, Madison.
- Co-organizer for an Aspen summer workshop, *Collider Physics: from the Tevatron to the LHC to the ILC*, Aug. 14-Sept.10, 2005, Aspen, Colorado.
- Co-organizer for the International workshop, *Physics at  $e^+e^-$  Linear Colliders*, July 15-20, 2005, Beijing, China,
- Co-organizer for the International workshop, *DIS–2005*, April 27 - May 1, 2005, Madison.
- Co-organizer for the International Conference, *Frontier Physics*, July 5-9, 2004, Beijing, China,
- Co-convener for the *Light Higgs Working Group* for American Physics Society (APS) Snowmass’96 workshop: New Directions for High Energy Physics (January 1996 – March 1997).
- Co-convener for the *Higgs Boson and Z Physics Working group at the First Muon Collider and at the Front End Muon Collider* for Fermilab First Muon Collider Workshop (Sept. 1997 – January 1998).
- Co-convener for the *Detector Tracking Working Group* for the Fermilab Very Large Hadron Collider Study (1997 – 1999).
- Co-convener for the *Top-quark Rare Decay Group* for the Fermilab Tevatron Run-II Study (July 1998 – 1999).
- “Interrogator” for a “Circle Line Tours” talk at Fermilab (Oct. 28, 1999).

- Co-convener for the *DPF Snowmass Workshop*: P1-4 and P3-4 subgroups (Strong dynamics); E1-4 subgroup (muon collider physics); E4-A subgroup (VLHC Physics scenario).

## University Service

- Chancellor’s Distinguished Research Award committee: 2020–2021.
- Dietrich School Dean search committee: Fall 2016–Spring 2017.
- University of Pittsburgh Provost search committee: Fall 2017–Spring 2018.
- Distinguished Faculty Committee: Fall 2016–2019.
- Dean’s Ad Hoc Committee: Nov. 30, 2012; Jan. 12, 2015; March 17, 2015.

## Departmental Service

- 2011–present: Director, Executive and Fellowship committees of PITT PACC
- 2011–present: Strategic planning committee
- 2011–present: Graduate Awards and Fellowships (PITT PACC Fellowships)
- 2013–present: Graduate Student China Initiative Award Committee
- 2019–present: Distinguished professorship committee
- 2015–2018: Graduate level core course committee
- 2012–2017: Graduate Admissions/Fellowship Committee



- Graduate Student PhD Dissertation Committees:
  - 2011–2012: Yueh-Feng Liu (Manfred Paulini, CMU)
  - 2013–2015: Ben Carlson (Jim Russ, CMU)
  - 2012–2015: GangQiang Liu (David Snoke)
  - 2011–2016: Ren Lu (Donna Naples)
  - 2012–2017: Cong Wang (Hrvoje Petek)
  - 2013–2017: Damon Hansen (Vittorio Paolone)
  - 2015–2018: Lin Dai (Adam Leibovich)
  - 2015–2019: Yanan Dai (Hrvoje Petek)
  - 2017–2019: Dengyu Yang (Jeremy Levi)
  - 2017–2020: Runyu Bi (Joe Boudreau)
  - 2016–2020: Yuhe Tang (Jeremy Levi)
  - 2016–present: Karan Kapoor (Hrvoje Petek)
  - 2017–present: Andi Li (Hrvoje Petek)
  - 2017–present: Xinyi Wu (Jeremy Levi)
  - 2018–present: Tong Pang (Vladimir Savinov)
  - 2019–present: Erfei Wang (Vladimir Savinov)
  - 2019–present: Nicholas Suarez (Tae Min Hong)
  - 2020–present: Shan Hao (Thomas Purdy)
  - 2020–present: Chao Zhou (Michael Hatridge)