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**Birth Date:** Jan. 11, 1947

**Marital Status:** Married

**Citizenship:** U.S.A.

## **Education**

1964 - 1968	Tunghai University B.S. with highest honor (1968)
1969 - 1974	State University of New York Stony Brook M.A. (1971) Ph.D. in Theoretical Physics (1975)

## **Awards and Honors**

First Prize Award in Theoretical Physics, Chinese Academy of Sciences, 1987.

Grand Challenge Awards, Department of Energy, 1988, 1989.

Alexander von Humboldt Award for Senior Scientist, Germany 1990.

University Research Professor, 1992 - 1993.

Fellow, American Physical Society, 1997

Unsung Heroes of Lexington, the Humanitarium, 2006

Albert D. and Elizabeth H. Kirwan Memorial Prize, University of Kentucky, 2018

Outstanding Alumni Award, Tunghai University, 2022

## **Fellowships**

University Fellowship, State University of New York at Stony Brook,  
Sept. 1969 - Aug. 1972.

Research Assistantship, Nuclear Theory Group, SUNY/Stony Brook,  
Sept. 1972 - Aug. 1974.

Faculty Research Fellowship at Lawrence Berkeley Lab., Associated  
Western Universities, May, 1981-July, 1981.

## **Conferences and Workshops Organized**

1st International Conference on Medium - and High - Energy Nuclear Physics and Spring School, Taiwan, May 1988.

1st UK Workshop on Lattice Gauge Calculations, 1988

2nd UK Workshop on Lattice Gauge Calculations, 1989.

2nd International Conference on Medium - and High - Energy Nuclear Physics, Taiwan, May 1990.

Workshop on Large Sparse Matrix Computation and Lattice QCD, Univ. of Kentucky, Aug. 31-Sept. 2, 1995

Int. Symposium on Trends in Sub-Atomic Physics, Taipei, August, 1997.

Role of Physics in the New Millennium: Research, Education & Society, Hong Kong, July 31 - Aug 4, 2000

Int. Conf. on Physics Education and Frontier Research, Shanghai, June, 2004.

Int. Workshop on Tau-Charm Physics, IHEP, Beijing, June 5 -7, 2006

Int. Conf. on Physics Education and Frontier Research [OCPA5], Taipei, June 27 - 30, 2006

4th International Symposium on Symmetries in Subatomic Physics (SSP2009),  
Taipei, June 2 -5, 2009

Lattice QCD Program, Kavli Institute of Theoretical Physics, Beijing, July 6 - 25, 2009

The XXVII International Symposium on Lattice Field Theory, Beijing, July 25 - 31, 2009

Int. Conf. on Physics Education and Frontier Research [OCPA6], Lanzhou, Aug. 3 - 7, 2009

NSTAR 2011, Jefferson Lab., May 17 - 20, 2011

Int. Conf. on Physics Education and Frontier Research [OCPA7], Kaohsiung, Aug. 1 - 5, 2011

StrongNet 2011, European Center for Theoretical Studies, Trento, Oct. 4 - 7, 2011

Extreme QCD (XQCD) Workshop, Washington, D.C., Aug. 21 - 23, 2012

QCD Study Group Meeting, Shanghai JiaoTong University, Apr. 2-4, 2016

8th Workshop on Hadron Physics in China and Opportunities Worldwide,  
Wuhan, Aug. 8-11, 2016

22nd International Spin Symposium,  
University of Illinois, Sept. 25-30, 2016

9th Workshop on Hadron Physics in China and Opportunities Worldwide,  
Nanjing University, July 24-28, 2017

36th International Symposium on Lattice Field Theory,  
Michigan State University, July 22-28, 2018

## Other Professional Activities

Associate Editor, International Review of Nuclear Physics,  
World Scientific Publishing Co. 1988 - 1994.

DOE Review Panel of Computational High Energy Physics, 1994.

DOE task force on research priority in lattice QCD for  
the national computing initiative, 1999

President of the Overseas Chinese Physics Association, 2003 & 2004

Committee on International Freedom of Scientists, American Physical Society, 2001 – 2004

Foreign Member of Editorial Board, Chinese Physics C, 2008 –

Academic Advisory Committee of Institute of Physics, Academia Sinica, Taiwan, 2014 –

USQCD Scientific Program Committee, 2016 – 2020

## **Committees**

Arts & Sciences Area Committee, 1991 - 1994.

Center for Computational Sciences Advisory Committee, 1987-1996.

University Computing Policy Adviser Committee, Chairman, 1990-1991.

Departmental Council, 1987-1988.

Board Member of the National Conference on Community and Justice, 1993 - 1999

Regional Advisor of the National Conference on Community and Justice, 2002 –

President's Task Force on Research and Graduate Education, 1997.

University Senate, 2001 – 2003

External Review Committee of the College of Arts and Sciences, 2005

Center for Computational Sciences Futures Committee, 2011

Campus Cyberinfrastructure Committee, 2012

Department Chair Search Committee, 2012

## **Grants for which I am the Principle Investigator**

DOE Grant for “Research in Theoretical Nuclear Physics”,  
DE-A505-82ER40074, 1982 - 1984.

NSF Grant for “Nuclear and Particle Physics”, RII-8610671, 1986-1991.

DOE Grant for “Lattice Calculation of Hadron Physics”,  
DE-FG02-02ER45967, 2002-2005.

DOE Grant for “Research in Theoretical Nuclear Physics”,  
DE-FG05-84ER40154, 1984-2013.

DOE Grant for “Lattice QCD Calculation of Nucleon Structure”,  
DE-SC0013065, 2014 - 2016

DOE Grant for “Topical Collaboration in Nuclear Theory for the Coordinated  
Theoretical Approach to Transverse Momentum Dependent Hadronic Structure in QCD”,  
2015 - 2020

DOE Grant for “Lattice QCD Calculation of Nucleon Structure”,  
DE-SC0013065, 2017- 2020

DOE Grant for “Lattice QCD Calculation of Nucleon Structure”,  
DE-SC0013065, 2020- 2023

DOE Grant for “Topical Collaboration of 3D quark-gluon structure of hadrons: mass, spin, and tomography” 2023-2028

DOE Grant for “Lattice QCD Calculation of Nucleon Structure”,  
DE-SC0013065, 2023- 2027

## Employment

Sep. 1974 - Sep. 1976	Visiting research scientist at CEN Saclay, Service de Physique Theorique, France
Oct. 1976 - June 1979	Research associate at Physics Dept. University of California, Los Angeles
July 1979 - Aug. 1980	Adjunct Assistant Professor, Physics Dept. University of California, Los Angeles
Sep. 1980 - July 1986	Associate Professor, Physics Dept. University of Kentucky, Lexington, KY
Dec. 1985 - July 1986	Visiting Professor, SUNY/Stony Brook, NY
Sept. 1990 - Dec. 1990	Visiting Professor, SUNY/Stony Brook, NY
Jan. 1991 - Aug. 1991	Humboldt Senior Scientist Award at HLRZ, Jülich, Germany
Jan. 1989 - 1999	Adjunct Professor, University of Science and Technology, Hefei, China
Aug. 1986 - May 2023	Professor, Physics Dept., University of Kentucky, Lexington, KY
Aug. 2006	Visiting Scientist, e-Science Institute, Edinburgh, UK
Apr. 2013 - June 2013	Visiting Prof., Physics Dept., Taiwan University
Sept. 2022 - Present	Affiliate at Lawrence Berkeley National Lab.

## Review Volume Edited

K.F. Liu, Chiral Solitons, (World Scientific, 1987).

## Conference Proceedings Edited

W-Y H. Wang, K.F. Liu, and Tzeng, Yiharn, Proc. of Int. Conf. on Medium- and High- Energy Nucl. Phys., Taipei, May 23-27, 1988 (World Scientific, 1989).

A. Alexandru, A. Bazarov, K.F. Liu, Proceedings of Extreme QCD 2012 (XQCD12) J. Phys. Conf. Ser. 432 (2013).

H.W. Lin, K.F. Liu et al., Proceedings of The 36th Annual International Symposium on Lattice Field Theory, PoS Lattice2018 (2019).

## Refereed Publications

1. G.E. Brown, V. Horsfjord, and K.F. Liu, “The Isovector Monopole Vibration: Coulomb Energies, Breaking of Charge Symmetry and Effects from  $\alpha$ -Particle Correlation in the Nuclear Surface”, *Nucl. Phys.* **A205**, 73-80 (1973).
2. C.W. Wong, S.K. Young, and K.F. Liu, “Change Asymmetry and Neutron-Neutron Scattering”, *Nucl. Phys.* **A253**, 96-123 (1975).
3. K.F. Liu, “Velocity Dependence of the Skyrme Interaction”, *Phys. Lett.* **60B**, 9-14 (1975).
4. K.F. Liu and G.E. Brown, “Giant Multipole Resonances”, *Nucl. Phys.* **A265**, 385-415 (1976).
5. K.F. Liu and N.V. Giai, “A Self-Consistent Microscopic Description of the Giant Resonances Including the Particle Continuum”, *Phys. Lett.* **65B**, 23-26 (1976).
6. K.F. Liu and G. Ripka, “Matrix Elements with Cranked Deformed Oscillator Wave Functions”, *Nucl. Phys.* **A293**, 333-349 (1977).
7. K.F. Liu and C.W. Wong, “Comment on Electromagnetic Mass Splitting of Hadrons in the M.I.T. Bag Model”, *Phys. Rev.* **D17**, 920-922 (1978).
8. K.F. Liu and C.W. Wong, “Meson Size Effect in the Newly Discovered Upsilon Particles”, *Phys. Lett.* **73B**, 223-225 (1978).
9. K.F. Liu and C.W. Wong, “Quark Potential Model Mass Formulas for Hadrons”, *Phys. Rev.* **D17**, 2350-2357 (1978).
10. C.W. Wong and K.F. Liu, “Detection of Nuclear Bag States”, *Phys. Rev. Lett.* **41**, 82-85 (1978).

11. B. Grammaticos and K.F. Liu, "Cranking Calculations with Self-Consistent Symmetries in a Triaxial Basis", *Il Nuovo Cimento* **50A**, 349-372 (1979).
12. K.F. Liu and C.W. Wong, "Possible Exotic Mesons in the Charmonium Region", *Phys. Rev.* **D21**, 1350-1366 (1980).
13. C.W. Wong, K.F. Liu and Y. Tzeng, "Inelastic Production of Deutron Bag States", *Phys. Rev.* **C22**, 2523-2530 (1980).
14. C.W. Wong and K.F. Liu, "Comments on the Recoupled Wave Functions of Four-quark Mesons", *Phys. Rev.* **D21**, 2039-2040 (1980).
15. C.W. Wong and K.F. Liu, "Nucleon-Nucleon Interaction", Topics in Nuclear Physics, ed. T.T.S. Kuo and S.S.M. Wong, *Lecture Notes in Physics* **144**, 1-174 (Springer-Verlag 1981).
16. K.F. Liu and C.W. Wong, "Four-quark Mesonic States of Low Orbital Excitations", *Phys. Lett.* **107B**, 391-394 (1981).
17. K.F. Liu and C.W. Wong, "Center of Mass Correction in the M.I.T. Bag Model", *Phys. Lett.* **113B**, 1-5 (1982).
18. K.F. Liu, "Landau Sum Rules and Density Dependence of Spin Dependent Landau Parameters", *Il Nuo. Cim.* **70A**, 329-338 (1982).
19. K.F. Liu, "Color-Electric Instabilities in Baryons and Dibaryons?", *Phys. Lett.* **114B**, 222-226 (1982).
20. B.A. Li and K.F. Liu, "In Search of  $Q^2\bar{Q}^2$  Mesons in  $\gamma\gamma$  Reactions", *Phys. Lett.* **118B**, 435-441 (1982).
21. K.F. Liu and F. Gabbard, "Charge Exchange Reactions and Solar Neutrino Detection in  $^{81}\text{Br}$ ", *Phys. Rev.* **C27**, 93-97 (1983).
22. K.F. Liu and C.W. Wong, "Cluster Model of Baryons", *Phys. Rev.* **D28**, 170-180 (1983).
23. B.A. Li and K.F. Liu, "Production of Vector Meson Pairs in Hadronic Collisions", *Phys. Rev.* **D28**, 1636-1643 (1983).
24. B.A. Li and K.F. Liu, "Possible Evidence of  $Q^2\bar{Q}^2$  Mesons in  $\gamma\gamma \rightarrow \rho^0\rho^0$  and  $\rho^+\rho^-$  Reactions", *Phys. Rev. Lett.* **51**, 1510-1513 (1983).
25. K.F. Liu, "Color van der Waals Force in the Coupled Channel Approach", *Phys. Lett.* **131B**, 195-201 (1983).
26. B.A. Li and K.F. Liu, "Possible Explanation of  $\rho^0\rho^0$  Production in  $J/\Psi$  Radiative Decay", *Phys Lett.* **134B**, 128-132 (1984).
27. B.A. Li and K.F. Liu, " $J/\Psi$  Pair Production in Hadronic Collisions", *Phys. Rev.* **D29**, 426-432 (1984).
28. B.A. Li and K.F. Liu, "Are  $Q^2\bar{Q}^2$  States Observable?", *Phys. Rev.* **D30**, 613-620 (1984).

29. K.F. Liu, J.S. Zhang and G.R.E. Black, “Time Dependence of Skyrme Soliton”, *Phys. Rev.* **D30**, 2015-2018 (1984).
30. B.A. Li, Q.X. Sheng, H. Yu, and K.F. Liu, “In Search of  $Q^2\bar{Q}^2$  Mesoniums in  $J/\Psi$  Radiative Decays”, *Phys. Rev.* **D32**, 308-311 (1985).
31. K.F. Liu, J.S. Zhang, and G.W. Shuy, “Comment on Fusion of Polarized Deuterons”, *Phys. Rev. Lett.*, **55**, 1649 (1985).
32. J.S. Zhang, K.F. Liu, and G.W. Shuy, “Fusion Reactions of Polarized Deuterons”, *Phys. Rev. Lett.* **57**, 1410-1413 (1986).
33. M. Oka, K.F. Liu, and H. Yu, “Size and Shape of Interacting Skyrmion”, *Phys. Rev.* **D34**, 1575-1580 (1986).
34. W. Wilcox and K.F. Liu, “Charge Radii from Lattice Relative Charge Distributions”, *Phys. Lett.* **B172**, 62-64 (1986).
35. G.E. Brown, H.Q. Song, R.K. Su, and K.F. Liu, “Roper Resonance and  $\pi N$  Phase Shift in the Skyrme Model with Defect”, *Nucl. Phys.* **A458**, 573-582 (1986).
36. L.S. Celenza, V. Mishra, C.M. Shakin, and K.F. Liu, “Exotic States in QED”, *Phys. Rev. Lett.* **57**, 55-57 (1986).
37. B.A. Li, K.F. Liu, and M.L. Yan, “Electromagnetic Mass Differences in the Skyrme Model”, *Phys. Lett.* **177B**, 409-412 (1986).
38. W. Wilcox and K.F. Liu, “Relative Charge Distributions for Quarks in Lattice Mesons”, *Phys. Rev.* **D34**, 3882-3887 (1986).
39. B.A. Li, K.F. Liu, and M.M. Zhang, “Semiclassical Skyrmion Equation of Motion”, *Phys. Rev.* **D35**, 1693-1697 (1987).
40. K.F. Liu and B.A. Li, “Evidence of Mesoniums in  $\bar{p}n$  Annihilation and Photon-photon Reactions”, *Phys. Rev. Lett.* **58**, 2288-2291 (1987).
41. B.A. Li, Q.X. Shen, and K.F. Liu, “Helicity Amplitudes of the Process  $J/\psi$  in the Glueball Interpretation of  $\theta(1700)$ ”, *Phys. Rev.* **D35**, 1070-1073 (1987).
42. B.A. Li and K.F. Liu, “Skyrmion Quantization and Phenomenology”, *Chiral Solitons*, ed. K.F. Liu (World Scientific, 1987), pp. 421-456.
43. W. Wilcox and K.F. Liu, “Symmetric Source Method for Lattice Electromagnetic Form Factors”, *Phys. Rev.* **D35**, 2056-2059 (1987).
44. K.F. Liu and S.F. Tuan, “Multiquark Structure of the U(3.1)”, *Z. Phys.* **C39**, 57-60 (1988).
45. B.A. Li and K.F. Liu, “Symmetry Breaking in  $\tau$  Decay”, *Z.Phys.* **C40**, 559-563 (1988).
46. K. Ishikawa, I. Tanaka, K.F. Liu and B.A. Li, “Tensor Meson Dominance and Glueball Candidate  $\theta(1720)$ ”, *Phys. Rev.* **D37**, 3216-3219 (1988).

47. R.M. Woloshyn, T. Draper, K.F. Liu and W. Wilcox, “Heavy Meson Decay Constants from Lattice QCD”, *Phys. Rev.* **D39**, 978-981 (1989).
48. B.A. Li, K.F. Liu, and M.L. Yan, “High Energy Elastic Scatterings of Skyrmions”, *Phys. Lett.* **212B**, 108-112 (1988).
49. K.F. Liu, G.L. Li, and G.E. Brown, “Role of Nuclear Binding in EMC Effect”, *Phys. Lett.* **213B**, 531-536 (1988).
50. R.M. Woloshyn and K.F. Liu, “A Study of the Nucleon Axial Current Coupling in Quenched Lattice QCD”, *Nucl. Phys.* **B311**, 527-540 (1988).
51. K.F. Liu, “Tree of Skyrmion”, *Lecture Notes of Spring School on Medium-and High-Energy Nucl. Phys.*, ed. P.Hwang and E. Henley (World Scientific, 1989), pp.245-272.
52. T. Draper, R.M. Woloshyn, K.F. Liu and W. Wilcox, “The Pion Form Factor in Lattice QCD”, *Nucl. Phys.* **B318**, 319-336 (1989).
53. K.F. Liu, B.A. Li, and K. Ishikawa, “Identification of  $\theta(1720)$  as a Tensor Glueball”, *Phys. Rev.* **D40**, 3648-3654 (1989).
54. B.A. Li and K.F. Liu, “K\*\* Mesoniums in Reactions and Hadronic Collisions”, *Phys. Rev.* **D40**, 2856-2860 (1989).
55. T. Draper, R.M. Woloshyn, and K.F. Liu, “Electromagnetic Properties of Nucleons from Lattice QCD”, *Phys. Let.* **B234**, 121-126 (1990).
56. Y.G. Liang, B.A. Li, K.F. Liu, and R.K. Su, “Born Amplitudes and Seagull Term in Meson Soliton Scattering”, *Phys. Lett.* **B243**, 133-140 (1990).
57. K.F. Liu, “Hadron Structure and Interaction form lattice QCD Calculation”, *Int. Jour. of Supercomputer Applications* **4**, 72-80 (1990).
58. G.W. Wu, M.L. Yan and K.F. Liu, “Flavor Symmetry and Mass Splitting Formulas for Sub-SU(3) Skyrmion in SU(N)”, *Phys. Rev.* **D43**, 185-195 (1991).
59. B.A. Li, M.L. Yan and K.F. Liu, “Quark Spin Content of the Proton in the Skyrme Model with Meson”, *Phys. Rev.* **D43**, 1515-1519 (1991).
60. K.F. Liu, H.D. Luo, Z.Y. Ma, Q.B. Shen, and S.A. Moszkowski, “Skyrme - Landau Parametrization of the Effective Interactions”, *Nucl. Phys.* **A534**, 1-24 (1991).
61. K.F. Liu, H.D. Luo, Z.Y. Ma, and Q.B. Shen, “Giant Resonances with the Extended Skyrme Interaction”, *Nucl. Phys.* **A534**, 25-47 (1991).
62. K.F. Liu, H.D. Luo, and Z.Y. Ma, “Particle-Particle Effective Interaction in  $^{18}O$  and  $^{18}F$ ”, *Nucl. Phys.*, **A534**, 58-76 (1991).
63. K.F. Liu, H.D. Luo, Z.Y. Ma, and Q.B. Shen, “Sum Rules for Nuclear Excitation with Skyrme-Landau Interaction”, *Nucl. Phys.* **A534**, 48-57 (1991).

64. S. Aoki et al., “Physics Goals of the QCD Teraflop Project”, *Int. Jour. Mod. Phys.* **C2**, 829-947 (1991).
65. P. de Forcrand and K.F. Liu, “Glueball Wavefunctions in SU(2) Lattice Calculation”, *Phys. Rev. Lett.* **69**, 245-248 (1992).
66. K.F. Liu, “Flavor-singlet Axial Charge of the Nucleon and Anomalous Ward Identity”, *Phys. Lett.* **B281**, 141-147 (1992).
67. W. Wilcox, T. Draper and K.F. Liu, “Chiral Limit of Nucleon Lattice Electromagnetic Form Factors”, *Phys. Rev.* **D46**, 1109-1122(1992).
68. G.E. Brown, Z.B. Li and K.F. Liu, “Why There is No Nuclear Dependence in Dimuon Production”, *Nucl. Phys.* **A555**, 225-236 (1993).
69. Y. Liang, K.F. Liu, B.A. Li, and K. Ishikawa, “Lattice Calculation of Glueball Matrix Elements”, *Phys. Lett.* **B307**, 375-382 (1993).
70. K.F. Liu, S.J. Dong, T. Draper, J.M. Wu and W. Wilcox, “Nucleon Axial Form Factor from Lattice QCD”, *Phys. Rev.* **D49**, 4755-4761 (1994).
71. K.F. Liu and S.J. Dong, “Origin of Difference Between  $\bar{u}$  and  $\bar{d}$  Partons in Nucleon”, *Phys. Rev. Lett.* **72**, 1790-1793 (1994).
72. S.J. Dong and K.F. Liu, “Stochastic Estimation with  $Z_2$  Noise”, *Phys. Lett.* **B328**, 130-136 (1994).
73. K.F. Liu, “Many Body Theory and Lattice Gauge Theory”, *Phys. Rep.* **388**, 463-470 (1994).
74. K.F. Liu, Dong, S.J., Draper, T., and Wilcox, W., “ $\pi NN$  and Pseudoscalar Form Factors from Lattice QCD”, *Phys. Rev. Lett.* **74**, 2172 - 2175 (1995).
75. S.J. Dong, J.-F. Lagaë and K.F. Liu, “Flavor-Singlet  $g_A$  from Lattice QCD”, *Phys. Rev. Lett.* **75**, 2096-2099 (1995).
76. J.-F. Lagaë and K.F. Liu, “Finite ma corrections for Sea Quark Matrix Elements on the Lattice”, *Phys. Rev.* **D52**, 4042 - 4052 (1995).
77. S.J. Dong, J.-F. Lagaë, and K.F. Liu, “ $\pi N\sigma$  Term,  $\bar{s}s$  in Nucleon, and Scalar Form Factor - A Lattice Study”, *Phys. Rev.* **D54**, 5496-5500 (1996).
78. C.S. Lam and K.F. Liu, “A Multiple Commutator Formula for the Sum of Feynman Diagrams”, *Nucl. Phys.* **B483**, 514-530 (1997).
79. C.S. Lam and K.F. Liu, “Consistency of the Baryon-Multimeson Amplitudes for Large Nc QCD”, *Phys. Rev. Lett.* **79**, 597-600 (1997).
80. C. Thron, S.J. Dong, K.F. Liu, and H.P. Ying, “Padé, - Z-2 Estimator of Determinants” *Phys. Rev.* **D57**, 1642-1653 (1998).

81. K.F.Liu, “Valence Quark Model from Lattice QCD”, *Lecture Notes in Physics, Chiral Dynamics: Theory and Experiment*, ed. A. Bernstein, D. Drechsel, and T. Walchepf, (Springer, 1998), pp. 78-85.
82. S.J. Dong, K.F. Liu, and A.G. Williams, “Lattice Calculation of the Strangeness Magnetic Moment of the Nucleon”, *Phys. Rev.* **D58**, 074504-1 - 074504-5 (1998).
83. J.S. Zhang, K.F. Liu, and G.W. Shuy, “Neutron Suppression in Polarized  $dd$  Fusion Reaction”, *Phys. Rev.* **C 60**, 054614-1 – 17 (1999).
84. K.F. Liu, S.J. Dong, T. Draper, D. Leinweber, J. Sloan, W. Wilcox, and R.M. Woloshyn, “Valence QCD: Connecting QCD to the Quark Model”, *Phys. Rev.* **D59**, 112001-1 – 26 (1999).
85. L. Lin, K.F. Liu, and J. Sloan, “A noisy Monte Carlo algorithm”, *Phys. Rev.* **D61**, 74505-1 – 5 (2000).
86. K.F. Liu, “Parton Degrees of Freedom from the Path-Integral Formalism”, *Phys. Rev.* **D 62**, 074501-1 – 10 (2000).
87. K.F. Liu, S.J. Dong, T. Draper, J. Sloan, W. Wilcox, and R.M. Woloshyn, “Reply to Isgur’s Comments on Valence QCD”, *Phys. Rev.* **D 61**, 118502-1 – 6 (2000).
88. N. Mathur, S. J. Dong, K. F. Liu, L. Mankiewicz, and N. C. Mukhopadhyay, “Quark Orbital Angular Momentum from Lattice QCD”, *Phys. Rev.* **D62**, 114504-1 – 5 (2000).
89. S.J. Dong, F.X. Lee, K.F. Liu, and J.B. Zhang, “Chiral Symmetry, Quark Mass, and Scaling of the Overlap Fermions”, *Phys. Rev. Lett.* **85**, 5051-5054 (2000).
90. K.F. Liu, “Strangeness Content in the Nucleon”, *J. Phys.* **G27**, 511-522 (2001).
91. S.J. Dong, T. Draper, I. Horvath, F.X. Lee, K.F. Liu, and J.B. Zhang, “Chiral Properties of Pseudoscalar Mesons on a Quenched  $20^4$  Lattice with Overlap Fermions”, *Phys. Rev.* **D65**, 054507-1 – 12 (2002).
92. I. Horvath, S.J. Dong, T. Draper, N. Isgur, F.X. Lee, K.F. Liu, J. McCune, H.B. Thacker, and J.B. Zhang, “Local Chirality of Low-Lying Dirac Eigenmodes and the Instanton Liquid Model”, *Phys. Rev.* **D66**, 034501 (2002).
93. K.F. Liu, “Finite Density Algorithm in Lattice QCD – a Canonical Ensemble Approach”, *Int. J. Mod. Phys.* **B16**, 2017-2032 (2002).
94. I. Horvath, S.J. Dong, T. Draper, F.X. Lee, K.F. Liu, H.B. Thacker, and J.B. Zhang, “On the Local Structure of Topological Charge Fluctuations in QCD”, *Phys. Rev.* **D67**, 011501 (2003).
95. B. Joo, I. Horvath, and K. F. Liu, “The Kentucky Noisy Monte Carlo Algorithm for Wilson Dynamical Fermions”, *Phys. Rev.* **D67**, 074505 (2003), [hep-lat/0112033].
96. K.F. Liu and S.J. Dong, “Heavy and Light Quarks with Lattice Chiral Fermions”, *Int. Jour. Modern Phys. A* **20**, 7241 (2005), [hep-lat/0206002].

97. I. Horvath, S.J. Dong, T. Draper, F.X. Lee, K.F. Liu, N. Mathur, H.B. Thacker, and J.B. Zhang, “Low-Dimensional Long-Range Topological Charge Structure in the QCD Vacuum”, *Phys. Rev.* **D68**, 114505 (2003), [hep-lat/0302009].
98. Y. Chen, S.J. Dong, T. Draper, I. Horváth, F.X. Lee, K.F. Liu, N. Mathur, and J.B. Zhang, “Chiral Logs in Quenched QCD”, *Phys. Rev.* **D70**, 034502 (2004), [hep-lat/0304005].
99. N. Mathur, Y. Chen, S.J. Dong, T. Draper, I. Horváth, F.X. Lee, K.F. Liu, and J.B. Zhang, “Roper Resonance and  $S_{11}(1535)$  from Lattice QCD”, *Phys. Lett.* **B605**, 137 (2005), [hep-ph/0306199]. [hep-ph/0306199].
100. K.F. Liu, “A Finite Baryon Density Algorithm”, Edinburgh 2003, QCD and numerical analysis III, 101-111 (2005), (Springer-Verlag), [hep-lat/0312027].
101. Y. Chen, S.J. Dong, T. Draper, I. Horvath, K.F. Liu, N. Mathur, S. Tamhankar, C. Srinivasan, F. X. Lee, J.B. Zhang, “The Sequential Empirical Bayes Method: An Adaptive Constrained-Curve Fitting Algorithm for Lattice”, [hep-lat/0405001].
102. N. Mathur, F.X. Lee, A. Alexandru, C. Bennhold, Y. Chen, S.J. Dong, T. Draper, I. Horvath, K.F. Liu, S. Tamhankar, and J.B. Zhang, “A Study of Pentaquarks on the Lattice with Overlap Fermions”, *Phys. Rev.* **70**, 074508 (2004), [hep-ph/0406196].
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“Theoretical tools for neutrino scattering: interplay between lattice QCD, EFTs, nuclear physics, phenomenology, and neutrino event generators,”  
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102. G. Colangelo, M. Davier, A. X. El-Khadra, M. Hoferichter, C. Lehner, L. Lellouch, T. Mibe, B. L. Roberts, T. Teubner H. Wittig, and **K.F. Liu** *et al.*  
“Prospects for precise predictions of  $a_\mu$  in the Standard Model,”  
2022 Snowmass Summer Study, [arXiv:2203.15810].
103. A. S. Kronfeld, **K.F. Liu** *et al.* [USQCD],  
“Lattice QCD and Particle Physics,”  
2022 Snowmass Summer Study, [arXiv:2207.07641].
104. B. Acharya, C. Adams, A. A. Aleksandrova, K. Alfonso, P. An, and **K.F. Liu**, *et al.*  
“Fundamental Symmetries, Neutrons, and Neutrinos (FSNN): Whitepaper for the 2023 NSAC Long Range Plan,”  
Whitepaper, [arXiv:2304.03451].
105. R. Abir, I. Akushevich, T. Altinoluk, D. P. Anderle, F. P. Aslan, **K.F. Liu**, *et al.*  
“The case for an EIC Theory Alliance: Theoretical Challenges of the EIC,”  
Whitepaper, [arXiv:2305.14572].
106. R. Alarcon, A. Aleksandrova, **K.F. Liu**, *et al.*  
“Fundamental Neutron Physics: a White Paper on Progress and Prospects in the US,”  
Whitepaper, [arXiv:2308.09059].

## Invited Talks at International Conferences and Schools

1. "Continuum RPA",  
Eighth Masurian School in Nuclear Physics,  
Mikolajki, Poland, Aug. 24-Sept. 5, 1975.
2. "Effective Particle-Hole Interactions",  
International School of Physics-Enrico Fermi,  
Varenna, Italy, July 26-Aug. 7, 1976.
3. "Neutron-Neutron Scattering Length and effective Range",  
International School of Nuclear Physics-Ettore Majorana,  
Erice, Italy, Sept. 3 - Sept. 13, 1976.
4. "Detection of Multi-Baryon Resonances",  
International Meeting on Exotic Resonances,  
Hiroshima, Japan, Sept. 1, 1978.
5. "Meson Spectra",  
1980 Guangzhou Conference on Theoretical Particle Physics,  
Guangzhou, China. Jan. 5-10, 1980.
6. "Nucleon-Nucleon Interactions",  
Lecture series presented at International Winter School in Nuclear Physics,  
Beijing, China, Dec. 22, 1980 - Jan. 9, 1981.
7. "Multi-quark Hadrons",  
Workshop on the Role of QCD and Quarks in Nuclear Physics,  
University of Washington, Seattle, Aug. 2, 1982.
8. "NN Deformation Potential in Bag Model and Color van der Waals Force",  
International Summer School on Nucleon-Nucleon Interaction and Nuclear Many-Body  
Problem,  
Changchun, China, July 25 - Aug. 1, 1983.
9. "Charge Exchange Reactions and Solar Neutrino Detection in  $^{81}\text{Br}$ ",  
International Summer School on Nucleon-Nucleon Interaction and Nuclear Many-Body  
Problem,  
Changchun, China, July 25 - Aug. 1, 1983.
10. "A Possible Measurement of Quark Gluon Plasma Temperature in Relativistic Heavy Ion  
Collisions",  
1983 Indiana University Nuclear Physics Workshop on Manifestation of Hadron Substruc-  
ture in Nuclear Physics,  
Bloomington, Oct. 19-21, 1983.
11. "Time Dependence of Skyrmion",  
Lewes Center for Theoretical Physics Workshop on Solitons,  
Lewes, June 11-15, 1984.

12. "Production of Vector Meson Pairs in Reactions",  
VIth International Workshop on Photon-Photon Collisions,  
Lake Tahoe, Sept. 10-13, 1984.
13. "Glueball Transition Amplitudes in SU(2) Lattice Gauge Monte Carlo Simulations",  
International Conference on Hadron Spectroscopy-1985,  
University of Maryland, April 20-22, 1985.
14. "Production of  $Q^2\bar{Q}^2$  Mesoniums in Reactions, Hadronic Collisions, and  $J/\Psi$  Radiative Decays",  
International Conference on Hadron Spectroscopy-1985,  
University of Maryland, April 20-22, 1985.
15. "Skyrme-Landau Parametrization of Effective Interactions",  
1985 Indiana University International Conference on Nuclear Physics,  
Bloomington, Oct. 21-23 (1985).
16. "Mesoniums and Glueballs",  
International Conference and Symposium on Unified Concepts of Many-Body Problems,  
SUNY/Stony Brook, NY, Sept. 4-6, 1986.
17. "Vacuum to Glueball Transition Amplitudes in SU(2) Lattice Gauge Monte Carlo Simulations",  
International Symposium on Lattice Gauge Theory,  
Brookhaven National Lab. Sept. 15-19, 1986.
18. "Evidence of Mesoniums in Reactions and  $\bar{p}n$  Annihilations",  
2nd International Conference on Hadron Spectroscopy, KEK,  
Tsukuba, Japan, April 16-18, 1987.
19. "Skyrmion Tree",  
Int. Conf. on Medium Energy Physics,  
Beijing, June 22-27, 1987.
20. "Exploring New Turfs in Nuclear Structure Calculations with Supercomputers",  
First SUPER Int. Conf.,  
Cornell Univ., March 29-30, 1988.
21. "Identification of  $\theta(1720)$  as a Tensor Glueball",  
VIII International Workshop on Photon-Photon Collisions,  
Shoresh, Israel, April 24-28, 1988.
22. "Tree of Skyrmiion",  
International Spring School on Medium and High Energy Physics,  
Taipei, May 16-24, 1988.
23. "Role of Nuclear Binding in EMC Effect",  
Int. Conf. on Medium and High Energy Nuclear Physics,  
Taipei, May 23-27, 1988.

24. "On the Tensor glueball candidate  $\theta(1720)$ ",  
BNL Workshop on Glueballs, Hybrids and Exotic Hadrons,  
Aug. 29-Sept. 1, 1988.
25. "Tensor Dominance and Glueball  $\theta(1720)$ ",  
Tau-Charm Workshop,  
SLAC, May 22-27, 1989.
26. "Mesoniums in Lattice QCD",  
Lattice 89 Conference,  
Capri, Sept. 22-27, 1989.
27. "Glueball Wavefunctions in SU(2) Lattice Calculation",  
Int. Conference on Hadron Spectroscopy,  
Ajaccio, France, Sept. 23-27, 1989.
28. "Hadron Structure and Interaction in Lattice QCD Calculation",  
Int. Conf. on Medium- and High- Energy Nucl. Phys.,  
Taiwan, May 14-18, 1990.
29. "Tensor Glueball",  
Kaon Workshop,  
TRIUMF, July 23-25, 1990.
30. "Hadron Structure and Interaction on the Lattice",  
International Conference on High Energy Physics,  
Singapore, Aug. 2-9, 1990.
31. "Glueball Matrix Elements",  
International Conference on Lattice Field Theory,  
Tallahassee, Oct. 8-12, 1990.
32. "Nucleon Axial-Vector Form Factors",  
International Conference on Lattice Field Theory,  
Tallahassee, Oct. 8-12, 1990.
33. "Flavor-singlet Axial Charge of the Nucleon",  
Moriond Conference on Hadron Interaction at High Energies,  
Les Arcs, Mar. 18-22, 1991.
34. "Quark Loop Calculations",  
Int. Conf. on Lattice Field Theory,  
Tsukuba, Japan, Nov. 5-9, 1991.
35. "Shell Model and Quark Model: Many Body Theory vs. Lattice QCD",  
Conf. on Realistic Nuclear Structure,  
Stony Brook, May 28-30 1992.
36. "Skyrmion Phenomenology",  
21st Int. Conf. on Differential Geometry Methods in Theoretical Physics,  
Tianjian, June 5-9, 1992.

37. "Nucleon Structure from Lattice QCD",  
QCD Workshop,  
Argonne National Lab., July 13-17, 1992.
38. "Sea-Quark Effects in Nucleon",  
Lattice '92 Conf.,  
Amsterdam, Sept. 15-19, 1992.
39. "Vacuum Polarization and Nucleon Structure",  
International Workshop on Nuclear and Intermediate Energy Physics,  
Bochum, Germany, Sept. 10-12, 1992.
40. "Sea-Quark Effects in Nucleon Structure",  
DPF '92, APS Particles and Fields Divisional Meeting,  
Fermilab, Nov. 1992.
41. "Sea-Quarks in Nucleon",  
Panic '93, Particle and Nuclear International Conference,  
Perugia, Italy, Jun. 28 - Jul. 2, 1993.
42. "Origin of Difference between  $\bar{u}$  and  $\bar{d}$  in the Nucleon",  
Institute of Nuclear Theory Workshop on Lattice Theory,  
Seattle, Jul. 12 - Jul. 30, 1993.
43. "Lattice Calculation of Nucleon Properties",  
Workshop on Chiral Symmetry and Nuclear Physics,  
European Center for Theoretical Studies, Sept. 20 - 30, 1993.
44. "Quark Model from QCD",  
Lattice '93 Conference,  
Dallas, Oct. 12 - 16, 1993.
45. "Glueball Masses and Matrix Elements from Lattice Calculation",  
Intersections of Nuclear and Particle Physics,  
St. Petersburg, May 30 - June 2, 1994.
46. "Nucleon Structure from Lattice QCD",  
2nd Energy Research Power Users Symposium,  
Rockville, MD, July 12, 1994.
47. "Quark Model from QCD",  
International Conference on High Energy Physics,  
Glasgow, July 21 - 27, 1994.
48. "Quark Model from Lattice QCD",  
Int. Workshop on Hadron Physics at  $e^+e^-$  colliders,  
Institute of High Energy Physics, Beijing. Oct. 12-15, 1994.
49. "Flavor-Singlet Axial Current and Gottfried Sum Rule from Lattice QCD",  
Cambridge Workshop on Particle Physics,  
Cambridge, England, Dec. 16-18, 1994.

50. "Valence Approximation in Lattice QCD",  
Int. Symp. on Lattice Field Theory,  
Melbourne, Australia, July 11-15, 1995.
51. "Stochastic Calculation with  $Z_2$  Noise",  
Workshop on Large Sparse Matrix Calculation and Lattice QCD,  
Univ. Of Kentucky, Aug. 31-Sept. 2, 1995.
52. "Nucleon Structure from Lattice QCD",  
3rd Int. Conf. On Computational Physics,  
Chunyuen, Taiwan, Nov. 13-17, 1995.
53. "Nucleon Structure from Lattice QCD",  
Plenary Talk at APS meeting,  
Indianapolis, May 2-5, 1996.
54. "Valence Quark Model from Lattice QCD",  
Institute of Nuclear Theory,  
Univ. of Washington, May 13-17, 1996
55. "Hybrid Monte Carlo without Pseudofermions",  
Lattice '96,  
St. Louis, June 4-8, 1996
56. "Valence Quark Model from Lattice QCD",  
Workshop on Hadron Physics,  
Argonne National Lab., July 22-25, 1996.
57. "Flavor Singlet  $g_A$  from Lattice Calculation",  
Int. Conf. on High-Energy Physics,  
Warsaw, Jul. 26-31, 1996
58. "Quark and Parton Model from Lattice QCD",  
3rd Int. Workshop on Particle Phenomenology,  
Taiwan, Nov. 15-17, 1996.
59. "Anatomy of Flavor-singlet  $g_A$ ",  
QCD Euroconference 97,  
Montpellier, July 3-9, 1997.
60. "Valence QCD and Quark Model",  
QCD Workshop,  
Bonn, July 28-31, 1997.
61. "Valence QCD and Quark Model",  
International Symposium on Trends in Sub-Atomic Physics,  
Taipei, August 7-12, 1997.
62. "Parton Degree of Freedom from Path Integral Formalism",  
2nd Joint Meeting of Chinese Physical Societies,  
Taipei, August 11-15, 1997.

63. "Valence Quark Model from Lattice QCD",  
Workshop on Chiral Dynamics,  
Mainz, Sept. 1-5, 1997.
64. "Valence QCD and Quark Model",  
Workshop on N\* Physics,  
Trento, May 18-22, 1998.
65. "Valence QCD and Lattice Results",  
International Conference on High Energy Physics,  
Vancouver, July 23, 30, 1998.
66. "Flavor-spin Structure of Nucleon from Lattice Calculations",  
Division of Nuclear Physics Annual Meeting,  
Santa Fe, Oct. 28-31, 1998.
67. "A Noisy Monte Carlo Algorithm",  
Workshop on Lattice QCD,  
Adelaide, Australia, Nov. 7 – 12, 1998.
68. "Valence QCD and Quark Model",  
Plenary talk, Joint US-Japan Workshop on Photon–Hadron Physics,  
Honolulu, Feb. 22 – 25, 1999.
69. "Parton Degrees of Freedom from Path-Integral Formalism",  
Plenary talk, Gordon Conference on Nuclear Physics and QCD,  
Newport, July 19 – 23, 1999.
70. "Noisy Monte Carlo with Fermion Determinant",  
Workshop on Numerical Challenges in Lattice QCD,  
Wuppertal, Germany, Aug. 22 - 24, 1999.
71. "A Noisy Monte Carlo Algorithm with Fermion Determinant",  
Workshop on Chiral Gauge Theory,  
Taiwan Univ., Sept. 13 – 18, 1999.
72. "Sea-quark from Lattice Perspective",  
Workshop on Sea-quarks and Hadron Physics,  
U. Conn, Nov. 11 – 13, 1999.
73. "Strangeness Content in the Nucleon",  
Plenary talk at Strangeness 2000 Conference,  
Berkeley, July 21 – 25, 2000.
74. "A Noisy Monte Carlo Algorithm with Fermion Determinant",  
Physics in New Millennium Conference,  
Hong Kong, July 31 – Aug. 4, 2000.
75. "Finite Density Algorithms"  
Workshop on a New Computing Venue for Lattice Gauge Theory Calculations",  
Brookhaven National Lab., Oct. 12-14, 2000.

76. "Ginsparg-Wilson Fermion and Higher Dimensional Anomaly",  
 Int. Conf.on Flavor Physics,  
 Zhang Jia Jie, China, May 31 - June 6, 2001.
77. "Chiral Properties of Pseudoscalar Mesons on the  $20^4$  Lattice with Overlap Fermions",  
 Workshop on Lattice QCD and Phenomenology,  
 INT, Univ. of Washington, Oct. 4-6, 2001
78. "Finite Density Algorithms"  
 Nankai Symposium on Mathematical Physics,  
 Tianjin, Oct. 7-10, 2001
79. "Hadron Structure and Spectroscopy with Overlap Fermions",  
 SciDac Meeting,  
 Jefferson Lab., Feb. 1, 2002
80. "Chiral Symmetry with Overlap Fermions",  
 Workshop on Hadron Physics with Lattice QCD,  
 Brookhaven National Lab., Mar. 18-22, 2002
81. "Hadron Spectroscopy with Overlap Fermions",  
 BLAST Workshop,  
 /MIT, July 22-26, 2002
82. "Lattice Gauge Theory and Chiral Symmetry",  
 Workshop on Theoretical Physics,  
 Zhejiang University, Oct. 24-26, 2002
83. "Finite Density Algorithms",  
 Third International Workshop on Numerical Analysis and Lattice QCD,  
 e-Science Institute, Edinburgh, June 30 - July 4, 2003
84. "Chiral Logs in Quenched QCD",  
 Workshop on Lattice Hadron Physics,  
 Cairns, Australia, July 22 - 30, 2003
85. "Pentaquarks from Lattice QCD with Overlap Fermions",  
 Penta-quark 2003 Workshop,  
 Jefferson Lab., Nov. 6-8, 2003
86. "Baryon Spectroscopy and Chiral Symmetry",  
 KEK workshop on Nuclear chiral dynamics,  
 KEK, Tsukuba, Mar. 18 -20, 2004
87. "Baryon Spectroscopy and Chiral Symmetry",  
 From Nuclear to Nucleon Structure,  
 Helsinki Institute of Physics, Helsinki, Apr. 1-2, 2004
88. "Baryon Spectroscopy and Chiral Symmetry",  
 Harryfest,  
 McGill University, Montreal, May 15, 2004

89. "Finite Density Algorithm – Canonical Ensemble Approach",  
Institute of Nuclear Theory Workshop on Finite Density,  
INT, Washington, June 3, 2004
90. "Chiral Symmetry, Hadron Physics, and Lattice QCD",  
4 lectures at Beijing School on Light Hadron Physics,  
Beijing, Sept. 26-30, 2004
91. "Finite Density and Mesoniums", Conference on Modern Challenges of Lattice Field Theory,  
KITP, Santa Barbara, Mar. 28 – Apr. 1, 2005
92. "Pentaquark Baryon and Tetraquark Mesoniums from Lattice QCD",  
International Conference on QCD and Hadron Physics,  
Peking Univ., Beijing, June 16 – 20, 2005
93. "Noisy Monte Carlo Method with Stochastically Estimated Determinants",  
International Conference on the Frontiers of Nonlinear and Complex Systems (ICFNCS),  
Hong Kong Baptist University , May 24–26, 2006
94. "Pentaquark Baryon and Tetraquark Mesoniums from Lattice QCD",  
International Workshop on Tau-Charm Physics,  
IHEP, Beijing, June 5 – 7, 2006
95. "The Strong Interaction of Quarks and Gluons on the Lattice",  
Public lecture at National e-Science Center of UK,  
Edinburgh, Sept. 6, 2006
96. "Pentaquark Baryon and Tetraquark Mesoniums from Lattice QCD",  
Workshop on Lattice QCD, Chiral Perturbation Theory, and Hadron Phenomenology,  
ECT, Trento, Oct. 2 – 6, 2006
97. "Pattern of Scalar Mesons",  
Yukawa International Seminars Series on Frontiers of QCD,  
Yukawa Institute, Kyoto, Nov. 20 – Dec. 8, 2006
98. "Simulation of Gauge Action from the Overlap Operator",  
Workshop On: Domain Wall Fermions at Ten Years,  
Riken, Brookhaven National Lab., Mar. 15-17, 2007
99. "Pattern of Light Scalar Mesons",  
Workshop on Hadron Structure and Lattice QCD,  
Bled, Slovenia, July 9-16, 2007
100. "Recent Finite Density Results from Lattice QCD",  
2007 International Symposium on Cosmology and Particle Astrophysics,  
Taipei, Nov. 13-15, 2007
101. "Pattern of Light Scalar Mesons',  
Chiral07, Chiral Symmetry in Hadron and Nuclear Physics,  
Osaka, November 13-16, 2007

102. "Pattern of Light Scalar Mesons",  
Scadron70, Workshop on Scalar Mesons and Related Topics,  
Lisbon, Feb. 11-16, 2008
103. "Quark and Glue Momenta and Angular Momenta from Lattice QCD",  
Gluon Polarization in the Nucleon Workshop,  
University of Illinois, June 16–17, 2008
104. "Finite Density Phase Transitions with the Canonical Ensemble",  
Extreme QCD Workshop,  
North Carolina State University, July 21–23, 2008
105. "Finite Density Phase Transitions with the Canonical Ensemble",  
INT Workshop on QCD Critical Point,  
INT, Univ. of Washington, Aug. 11–15, 2008
106. "Hadron Spectroscopy from Lattice QCD",  
BES Workshop on Hadron Physics,  
Xian, Oct. 16–18, 2008
107. "Parton Distribution Function and Disconnected Insertions on the Lattice",  
DOE National Exascale-computing Workshop,  
Washington, D.C. Jan. 26 – 28, 2009
108. "Roper Resonance and Excited Baryons from the Lattice",  
NSTAR International 2009 Workshop on Baryons  
IHEP, Beijing, Apr. 19 – 22, 2009
109. "Nucleon Structure and Hadron Spectroscopy",  
USQCD All Hand's Meeting, Fermilab, May 14–15, 2009
110. "Moments and Strange Parton Distribution",  
10th Conference on the Intersections of Particle and Nuclaea Physics (CIPANP 2009),  
San Diego, May 25 – 31, 2009
111. "QCD Critical End Point from Lattice",  
4th International Symposium on Symmetries of Subatomic Phyics (SSP 2009),  
Taipei, June 2 – 5, 2009
112. "Preliminary Results from Overlap Fermion on 2+1 Flavor Domain-wall Fermion Configrations",  
Lattice QCD Workshop at Kavli Institute of Theoretical Physics, China  
Beijing, July 6 – 25, 2009
113. " $f_D$  and  $f_{D_s}$  from Chiral Fermions",  
International Symposium of Lattice Field Theory,  
Peking University., Beijing, Jul. 26 – 31, 2009
114. "Nucleon Structure from Lattice QCD",  
Internationl Conference on Physics Eduation and Frontier Physics,  
Lanzhou, Aug. 3 – 7, 2009

115. “Precision Charm-light Mesons”,  
High Energy Physics Workshop (IHEP and PKU),  
Sanya, Dec. 17 – 22, 2009
116. “Precision Charmed Meson Spectroscopy and Decay Constants from Chiral Fermions”,  
New Frontiers in QCD 2010 Workshop,  
Yukawa Institute of Theoretical Physics, Kyoto, Feb. 1 – 18, 2010
117. “Hadron Spectroscopy and Nucleon Form Factors”,  
All Hands Meeting of USQCD Collaboration,  
BNL, Apr. 16 – 17, 2010
118. “ $N_F = 3$  Critical Point from Canonical Ensemble”,  
International Symposium of Lattice Field Theory,  
Villasimius, Sardinia, June 14 – 19, 2010
119. “ $N_F = 3$  Critical Point from Canonical Ensemble”,  
XQCD workshop,  
Bad Honnef, June 21 – 23, 2010
120. “Hadron Physics from Lattice QCD”,  
2nd International Workshop on Hadron Physics,  
Fragrant Hill, Beijing, July 28 – 31, 2010
121. “Lattice Calculation of New Mesons in the Charm Region and Nucleon Structure”,  
Weihai Summer Symposium on QCD and Hadron Physics,  
Weihai, Shangdong, Aug. 4 – 10, 2010
122. “Hadron Spectroscopy and Nucleon Form Factors”,  
All Hands Meeting of USQCD Collaboration,  
BNL, May 6 – 7, 2011
123. “Quark and Glue Momenta and Angular Momenta”,  
International Symposium of Lattice Field Theory,  
Lake Tahoe, July 11 – 15, 2011
124. “Quark and Glue Momenta and Angular Momenta”,  
International Conference on Physics Edition and Frontier Physics,  
Kaohsiung, Aug. 1 – 5, 2011
125. “Path-integral Formulation of Deep Inelastic Scattering and Connected Sea Partons”,  
Taida Lattice Workshop,  
Taiwan University, Aug. 9 – 10, 2011
126. “Quark and Glue Momenta and Angular Momenta”,  
Taida Lattice Workshop,  
Taiwan University, Aug. 9 – 10, 2011
127. “Lattice Calculation of Critical Point from Canonical Ensemble”,  
Workshop on Fluctuations, Correlations, and RHIC Low Energy Runs,  
BNL, Oct. 3 – 5, 2011

128. “Quark and Glue Momentum and Angular Momentum”,  
Workshop on Orbital Angular Momentum,  
INT, U. Washington, Feb. 6– 10, 2012
129. “Where Does the Spin of the Proton Come from?”,  
Workshop on Electroweak Nuclear Physics,  
Duke University, Mar. 8 – 10, 2012
130. “Lattice Calculation of Nucleon Structure and Hadron Spectroscopy”,  
USQCD All Hands Meeting,  
Fermilab, May 4 – 5, 2012
131. “Progress with Overlap Fermions”,  
Workshop on New Horizons for Lattice Computations with Chiral Fermions,  
BNL, May 14 – 16, 2012
132. “Nucleon Structure from Lattice QCD”,  
Workshop on Nucleon Structure,  
Kavli Institute of Theoretical Physics, Beijing, July 9 – 14, 2012
133. “Where Does the Spin of the Proton Come from?”,  
4th Hadron Workshop,  
Kavli Institute of Theoretical Physics, Beijing, July 16 – 20, 2012
134. “Roper Resonance and  $1^{-+}$  Meson”,  
Workshop on Excited States from Lattice QCD,  
INT, U. Washington, Aug. 1 – 20, 2012
135. “Where Does the Spin of the Proton Come from?”,  
Diffraction 2012 Conference,  
Lanzarote, Canary Islands, Sept. 10 – 15, 2012
136. “Finite Density with Canonical Ensemble and the Sign Problem”,  
International Workshop on the Sign Problem in QCD and Beyond,  
Regensburg, Germany, Sept. 19 – 22, 2012
137. “Where Does the Spin of the Proton Come from?”,  
Division of Nuclear Physics Meeting, APS,  
Newport Beach, Oct. 24 – 27, 2012
138. “Nucleon structure and overlap fermion”,  
QCD Workshop at Jiao-Tung University,  
Shanghai, Mar. 22, 2013.
139. “Spin structure of the proton”,  
5th Asian Nuclear Physics Association meeting,  
Taipei, Apr. 19, 2013.
140. “Roper resonance and  $1^{-+}$  mesons”, HEP Workshop on XYZ Particles,  
Beijing, May 10, 2013.

141. “Path-integral formulation of parton distribution function”,  
Workshop on Lattice QCD and Hadron Physics,  
Taiwan University, Taipei, June 5, 2013.
142. “Proton spin components and connected sea partons”,  
Workshop on the Flavor Dependence of Partons, ETC, Trento, July 2, 2013.
143. “The Roper puzzle”,  
2013 International Symposium of Lattice Field Theory,  
Mainz, Germany, Aug. 1, 2013.
144. “Lattice results on nucleon spin structure”,  
9th Circum-Pan-Pacific Symposium on High Energy Spin Physics,  
Jinan, China, Oct. 28 - 31, 2013.
145. “From Nuclear Structure to Nucleon Structure”,  
45 Years of Nuclear Theory at Stony Brook: a Tribute to Gerald E. Brown,  
Stony Brook, Nov. 24 - 26, 2013.
146. “Challenges of Lattice Calculation of Parton Distribution Functions”,  
Maryland MCFP Workshop on LP3,  
U. Maryland, Mar. 31, 2014.
147. “Quark and Glue Structure of the Nucleon”,  
USQCD All Hands Meeting,  
JLab, Apr. 18-19, 2014.
148. “Quark and Glue Components of Proton Spin”,  
QCD Evolution Workshop,  
Santa Fe, May 12 - 16, 2014.
149. “Pi N Sigma Term and Scalar Form Factor from Overlap Fermion”,  
2014 International Symposium of Lattice Field Theory,  
Columbia University, NYC, June 23-28, 2014.
150. “Nuclear Structure with Quarks and Glue”,  
Computational Nuclear Physics Town Meeting,  
July 14-15, 2014.
151. “Quark and Glue Components of Nucleon Spin - Lattice QCD Calculation”,  
ECT Workshop on Spin and Orbital Angular Momentum of Quarks and Gluons in the  
Nucleon,  
Trento, Aug. 25- 29, 2014.
152. “Quark and Glue Spins of the Nucleon”,  
Plenary talk at the 21st International Symposium on Spin Physics,  
Peking University, Oct. 20-24, 2014
153. “Quark and Glue Spins of the Nucleon”,  
81st Annual Meeting of the APS Southeastern Section,  
Columbia, SC, Nov. 12-15, 2014.

- 154. “Quark and Glue Components of the Proton Spin”,  
6th Workshop of the APS Topical Group on Hadron Physics (GHP 2015)  
Baltimore, Apr. 8 - 10, 2015.
- 155. “Parton Distribution Function from Hadronic Tensor on the Lattice”,  
2015 International Symposium of Lattice Field Theory,  
Kobe, July 14 - 18, 2015.
- 156. “Quark and Glue Structure of the Nucleon”,  
International School of Nuclear Physics – 37th Course: Probing Hadron Structure with  
Lepton and Hadron Beams,  
Erice, Sept. 16 - 24, 2015
- 157. “Quark and Glue Components of the Proton Spin”,  
INT Workshop on Intersections of BSM Phenomenology and QCD for New Physics Searches,  
Sept. 21 - Oct. 4, 2015
- 158. “Meson and Nuclear Mass Decomposition from Lattice QCD”,  
Workshop on The Proton Mass: At the Heart of Most Visible Matter,  
Temple University, Mar. 28 - 29, 2016
- 159. “Quark and Glue Structure of Nucleon”,  
QCD All Hands Meeting,  
BNL, Apr. 29 - 30, 2016
- 160. “PDF from the Hadronic Tensor on the Lattice and Connected Sea Evolution”,  
QCD Evolution, NIKHEF, May 30 - June 3, 2016
- 161. “Quark and Glue Structure of Nucleon”,  
The 3rd Workshop on QCD Phase Structure,  
Wuhan, June 6 - 9, 2016
- 162. “Quark Spin of Nucleon and Topology”,  
QCD Workshop Series in Paris,  
June 13 - 16, 2016
- 163. “Nucleon Isovector Matrix Elements at Physical Point and Cost Comparison”,  
2016 International Symposium of Lattice Field Theory,  
Southampton, July 25 - 30, 2016
- 164. “PDF from the Hadronic Tensor on the Lattice and Connected Sea Evolution”,  
Plenary talk at 7th International Conference on Physics Opportunities at an ElecTron-Ion-  
Collider (POETIC 7),  
Temple University, Philadelphia, Nov. 14 - 18, 2016
- 165. “Proton Structure from Lattice QCD”,  
3D Parton Distributions: Path to LHC,  
INFN, Frascati, Nov. 29 - Dec. 2, 2016
- 166. “Origin of Proton Mass and Spin”,  
Workshop on Ting-Wai Chiu’s Lifetime Achievement,  
Taiwan University, Taipei, Feb. 3, 2017

167. “PDF from the Hadronic Tensor on the Lattice and Connected Sea Evolution”,  
Parton-Lattice Workshop,  
Oxford University, Mar. 22 - 24, 2017
168. “Origin of Nucleon Mass”,  
ECT Workshop on Mass Decomposition,  
Trento, Apr. 3 - 7, 2017
169. “Variance Reduction and Cluster Decomposition”,  
2017 International Symposium of Lattice Field Theory,  
Granada, June 19 - 24, 2017
170. “Hadronic Tensor from Lattice QCD”,  
T.D. Lee Institute Workshop on PDFs,  
Peking University, July 14 - 16, 2017
171. “Origin of Proton Mass and Spin”,  
9th workshop on hadron physics in China and opportunities worldwide,  
Nanjing University, July 24 - 28, 2017
172. “PDF from the Hadronic Tensor on the Lattice and Connected Sea Evolution”,  
9th workshop on hadron physics in China and opportunities worldwide,  
Nanjing University, July 24 - 28, 2017
173. “Sea Partons from Euclidean Hadronic Tensor”,  
INT Workshop on The Flavor Structure of Nucleon Sea,  
Oct. 2 - 13, 2017
174. “Comments on Current-Current Correlators”,  
Lattice PDF Workshop,  
Maryland University, Apr. 6-8, 2018
175. “Accelerator Based Fusion Reactor”,  
12th West Lake International Symposium on Plasma Simulation,  
Hangzhou, May 3-5, 2018
176. “Glue Spin from Lattice QCD”,  
13th Conference on the Interaction of Particle and Nuclear Physics (CIPANP),  
Palm Springs, May 29 - June 3, 2018
177. “Roper State from Overlap Fermion”,  
2018 International Symposium of Lattice Field Theory,  
Michigan State University, July 23 - 28, 2018
178. “Proton Mass and Spin Decomposition”,  
INT Workshop on Probing Nucleons and Nuclei in High Energy Collisions,  
INT, University of Washington, Oct. 15 - 20, 2018
179. “Hadronic Tensor from Euclidean Path-Integral Formalism”,  
Workshop on EICC  
Guangzhou, Jan. 8, 2019

180. “Partons from the Path-Integral Formalism of the Hadronic Tensor”,  
BNL workshop on Lattice Parton Distribution, Apr. 25, 2019
181. “Lattice QCD for Hadron Structure in the EIC Era”,  
LPC Workshop on Physics Connection between LHC and EIC  
Fermilab, Nov. 14, 2019
182. “Valence and Connected Sea Partons from Hadronic and LaMET”,  
Pheno Symposium, Pittsburg (online) , May 4, 2020
183. “Gluon Content from Lattice QCD”,  
Gluon content of proton and deuteron with the Spin Physics,  
Dubna (online), Oct. 1, 2020
184. “Decomposition of Proton Mass and Rest Energy”,  
3rd Proton Mass Workshop; Origin and Perspective,  
Argonne National Lab, Jan. 14-16, 2021
185. “A Rhyming Couplet for Prof. Akito Arima”,  
Akito Arima Memorial, Apr. 8, 2021
186. “What Makes Proton a Stable Particle and How Can the EIC Provides Insights”,  
2nd PSQEIC Workshop, APTCP, July 19-23, 2021
187. “PDF in PDFs”,  
38th International Symposium on Lattice Field Theory”,  
MIT, July 26-30, 2021
188. “Hadron Cosmological Constant and Origin of Proton Mass”,  
vConf2021- A Virtual Tribute to Quark Confinement and the Hadron Spectrum,  
University of Stavanger, Aug. 2-6, 2021
189. “Neutrino-Nucleon Scattering and Roper State”,  
Tackling The Real-Time Challenge In Strongly Correlated Systems: Spectral Properties  
From Euclidean Path Integrals,  
ECT, Sept. 13-17, 2021
190. “Accelerator Based Fusion Reactor”,  
Symposium on Fusion Engineering,  
Dever, Dec. 12 - 16, 2021
191. “Decomposition of Proton Mass and Hadron Cosmological Constant”,  
BNL-HET &RBRC Joint Workshop “DWQ@25”,  
BNL, Dec. 13 -17, 2021
192. “Neutron Electric Dipole Moment with Overlap Fermion”,  
INT Workshop on Hadron Parity Violation,  
INT, Seattle, Jan. 24-27, 2022
193. “Neutrino-Nucleon Scattering from Hadronic Tensor on the Lattice”,  
ITP Workshop on Neutrinos as a Portal to New Physics and Astrophysics,  
Santa Barbara, Mar. 3, 2022

194. “Hadrons, Type II Superconductors, and Cosmological Constant”,  
QCD Evolution 2022,  
University of Virginia, May 10, 2022
195. “Muon g-2 with Overlap Valence Fermion”,  
Schwingerfest,  
UCLA, June 15, 2022
196. “Hadrons, Type II Superconductors, and Cosmological Constant”,  
INT workshop on Origin of the Visible Universe,  
INT, Seattle, June 17, 2022
197. “Hadrons, Type II Superconductors, and Cosmological Constant”,  
CFNS Workshop, High Luminosity-EIC  
UVA, June 23, 2022
198. “Hadrons, Type II Superconductors, and Cosmological Constant”,  
14th Quark Confinement and Hadron Spectroscopy,  
Stavanger, Aug. 1, 2022
199. “Neutron Electric Dipole Moment with Overlap Fermion”,  
ECT\* Workshop on Neutron Electric Dipole Moment,  
Trento, Aug. 4, 2022
200. “Neutron Electric Dipole Moment with Overlap Fermion”,  
Lattice Conference 2022  
Bonn, Aug. 8, 2022
201. “Hadrons, Type II Superconductors, and Cosmological Constant”,  
14th Conference on the Intersection of Particle and Nuclear Physics (CIPANP),  
Orlando, Aug. 30, 2022
202. “Hadronic Tensor with Lattice QCD – Neutrino-Nucleon Scattering”,  
Parton Workshop,  
INT, Seattle, Sept. 12, 2022
203. “Hadrons, Type II Superconductors, and Cosmological Constant”,  
Mainz workshop on Fermion Actions, Mar. 10, 2023
204. “Hadrons, Type II Superconductors, and Cosmological Constant”,  
Workshop on High Temperature QCD, Prague, Apr. 14, 2023
205. “ $\pi N$  and Other Nucleon Excited States in Nucleon Two- and Three-point Functions”,  
40th Lattice Conference, Fermilab, Aug. 2, 2023
206. “Hadrons, Type II Superconductors, and Cosmological Constant”,  
3rd Chinese Lattice Conference, Beijing, Oct. 7, 2023
207. “Hadrons, Type II Superconductors, and Cosmological Constant”,  
EIC workshop in India, Bangalore, Feb. 7, 2024

208. “Energy and Pressure Analogies Linking Hadrons, Superconductors, and Cosmic Expansion”,  
4th EIC Asia Workshop, Fudan University, Shanghai, July 2, 2024
209. “ $\pi$  N states in Nucleon Two-, Three-, and Four-point Functions - importance of correct prior”,  
ff INT Workshop on Inverse Problems and Uncertainty Quantification in Nuclear Physics,  
INT, Seattle, July 10, 2024
210. “Trace Anomaly Form Factors of the Pion and Nucleon ”,  
Recent Advances in High Temperature QCD Workshop, Budapest, Oct. 29, 2024

## Seminars and Talks Given at Various Institutions and Conferences

1. "Rotational Motion Galore",  
SUNY  
Stony Brook, Nov. 29, 1973.
2. "Giant Dipole Resonance with a New Skyrme Interaction",  
APS Meeting,  
Washington, D.C., April, 1974.
3. "Giant Multipole Resonances",  
C.E.N.  
Saclay, Nov. 21, 1974.
4. "One-and Two-Particle Properties Outside the Closed Shell",  
Saclay Symposium on Nuclear and Particle Physics,  
Gif-sur-Yvette, April 20, 1975.
5. "A Self-Consistent Description of Giant Resonances including Particle Continuum",  
Institut de Physique Nucleaire,  
Orsay, May 26, 1976.
6. "Some Applications of Skyrme Interactions",  
Stony Brook, Sept. 30, 1976.
7. "Some Applications of Skyrme Interactions",  
Michigan St. Univ. Oct. 4, 1976.
8. "Giant Multipole Resonances",  
UCLA, Jan. 19, 1977.
9. "Quark Potential Model Mass Formulas for Hadrons",  
Lawrence Berkeley Lab.,  
Aug. 24, 1977.
10. "Quark Model Mass Formulas for Hadrons",  
Institut de Physique Nucleaire,  
Orsay, Dec. 2, 1977.
11. "Meson Size Effects in the Upsilon Particles",  
APS Meeting,  
San Francisco, Jan. 23, 1978.
12. "Quark Potential Model Mass Formulas for Hadrons",  
UCLA,  
Jan 18, 1978.
13. "Quark Potential Model of Hadrons",  
University of Pennsylvania,  
Feb. 28, 1978.

14. "Quark Model of Hadron Masses",  
Stanford University, March 14, 1978.
15. "Giant Multipole Resonances",  
LSU, March 16, 1978.
16. "Detection of Quark Bag State",  
Colloquium at LSU, March 16, 1978.
17. "Giant Resonances",  
Lawrence Berkeley Lab., March 20, 1978.
18. "Detection of Nuclear Bag States",  
Institute of High Energy Physics,  
Peking, Aug. 23, 1978.
19. "Nuclear Response Function and Giant Resonances",  
Peking University,  
Peking, Aug. 25, 1978.
20. "Quark Model of Hadron Masses",  
Tokyo University, Sept. 6, 1978.
21. "Quark Models of Hadrons and Nuclei",  
Northridge, Oct. 27, 1978.
22. "Quark Models of Hadrons and Nuclei",  
Brooklyn College, Feb. 22, 1979.
23. "The Puzzling Mesons in the Charmonium Region",  
UCLA, April 25, 1979.
24. "Quark Models of Hadrons and Nuclei",  
Univ. of Washington,  
Seattle, Dec. 19, 1979.
25. "Quark Models of Hadrons & Nuclei",  
Institute of High Energy Physics,  
Beijing, Jan. 15, 1980.
26. "Quark Models of Hadrons & Nuclei",  
Nanjing Univ.,  
Nanjing, Jan. 18, 1980.
27. "Quark Models of Hadrons & Nuclei",  
Academia Sinica,  
Shanghai, Jan. 20, 1980.
28. "Quark Models of Hadrons & Nuclei",  
Northridge, Feb. 15, 1980.
29. "Quarks, Gluons, and Hadron Spectroscopy",  
Colloquium at Univ. of Kentucky, March 17, 1980.

30. "Quark Models of Hadrons & Nuclei",  
Argonne National Lab., March 19, 1980.
31. "Quark in Nuclei",  
Nankai Univ.,  
Tianjin, Jan. 3, 1981.
32. "Quark in Nuclei",  
Institute of Modern Physics,  
Lanchow, Jan. 12, 1981.
33. "Quark in Nuclei",  
Lawrence Berkeley Lab., May 13, 1981.
34. "Multiquark Systems and NN Interaction at Short-Distances",  
Indiana Univ., Nov. 30, 1981.
35. "(p,n) Reactions and Gamow-Teller Transitions",  
Univ. of Kentucky, Nov. 18, 1981.
36. "Multi-quark Hadrons and Color van der Waals Force",  
SUNY/Stony Brook, Dec. 11, 1981.
37. "Color van der Waals Force Revisited",  
APS Meeting in Washington, D.C., April 26, 1982.
38. "Multi-quark Hadrons",  
Lawrence Berkeley Lab., July 19, 1982.
39. "Multi-quark Hadrons",  
TRIUMF, Aug. 3, 1982.
40. "Charge Exchange Reactions and Solar Neutrino Detection in  $^{81}\text{Br}$ ",  
Oak Ridge Nat. Lab., Nov. 5, 1982.
41. "Production of Vector Meson Pairs in High Energy Reactions",  
Workshop on Quarks in Nuclei,  
SUNY/Stony Brook, Dec. 17, 1982.
42. "Production of Vector Meson Pairs in High Energy Reactions",  
Rutgers Univ., Dec. 20, 1982.
43. "Possible Measurement of Quark Gluon Plasma Temperature in Heavy Ion Reactions",  
Theory Workshop,  
Oak Ridge Nat. Lab., June 11, 1983.
44. "NN Deformation Potential in Bag Model and Color van der Waals Force",  
Argonne Nat. Lab., July 6, 1983.
45. "Production of Vector Meson Pairs in Reactions, Hadronic Collisions, and  $J/\Psi$  Radiative Decays",  
Institute of High Energy Physics,  
Beijing, Aug. 2, 1983.

46. "Production of Vector Meson Pairs in Reactions, Hadronic Collisions, and  $J/\Psi$  Radiative Decays",  
 DESY,  
 Hamburg, Aug. 26, 1983.
47. "Production of Vector Meson Pairs in Reactions, Hadronic Collisions, and  $J/\Psi$  Radiative Decays",  
 Colloquium at Vanderbilt University, Dec. 2, 1983.
48. "Hartree-Fock and RPA",  
 Univ. of Kentucky, Feb. 9, 1984.
49. "Smoking Gun Signatures of the Multi-quark Hadrons",  
 Colloquium at University of Kentucky, April 20, 1984.
50. "NN Deformation Potential in Bag Model",  
 APS Meeting,  
 Washington, D.C., April 25, 1984.
51. "Production of  $Q^2\bar{Q}^2$  Mesoniums in High Energy Reactions",  
 Colloquium,  
 Univ. of Kentucky, April 20, 1984.
52. "Time Dependence of Skyrmion",  
 Lawrence Berkeley Lab. Sept. 14, 1984.
53. "Time Dependence of Skyrmion",  
 Oak Ridge National Lab., Oct. 13, 1984.
54. "Time Dependence of Skyrme Soliton",  
 SUNY,  
 Stony Brook, Oct. 18, 1984.
55. "Production of  $Q^2\bar{Q}^2$  Mesons in Reactions, Hadronic Collisions and  $J/\Psi$  Radiative Decays",  
 SLAC, March 20, 1985.
56. "Production of  $Q^2\bar{Q}^2$  Mesoniums",  
 UC Riverside, March 21, 1985.
57. "Production of  $Q^2\bar{Q}^2$  Mesoniums",  
 UCLA, March 22, 1985.
58. "Smoking Gun Signatures of the Multi-quark Hadrons",  
 Colloquium at University of Kentucky, April 20, 1984.
59. "NN Deformation Potential in Bag Model",  
 APS Meeting,  
 Washington, D.C., April 25, 1984.
60. "Production of  $Q^2\bar{Q}^2$  Mesoniums in High Energy Reactions",  
 Colloquium,  
 Univ. of Kentucky, April 20, 1984.

61. "Time Dependence of Skyrmion",  
Lawrence Berkeley Lab. Sept. 14, 1984.
62. "Time Dependence of Skyrmion",  
Oak Ridge National Lab., Oct. 13, 1984.
63. "Time Dependence of Skyrme Soliton",  
SUNY,  
Stony Brook, Oct. 18, 1984.
64. "Production of  $Q^2\bar{Q}^2$  Mesons in Reactions, Hadronic Collisions and J/ Radiative Decays",  
SLAC, March 20, 1985.
65. "Production of  $Q^2\bar{Q}^2$  Mesoniums",  
UC Riverside, March 21, 1985.
66. "Production of  $Q^2\bar{Q}^2$  Mesoniums",  
UCLA, March 22, 1985.
67. "Detection of Quark Gluon Plasma via Quadru-leptons",  
Brookhaven National Lab., April 21, 1985.
68. "Monte Carlo Simulations",  
Univ. of Kentucky, May 8, 1985.
69. "Glueball Transition Amplitudes in SU(2) Monte Carlo Calculations",  
Lewes Workshop on Lattice Gauge Calculations, July 3, 1985.
70. "Glueball Transition Amplitudes in SU(2) Monte Carlo Calculations",  
Institute of High Energy Physics, Beijing Aug. 12, 1985.
71. "Introduction to Skyrmion",  
Institute of Atomic Energy,  
Beijing, Aug. 13, 1985.
72. "Giant Multipole Resonances",  
Univ. of Kentucky, Sept. 12, 1985.
73. "Recent Development in Skyrmion Phenomenology",  
SUNY  
Stony Brook, Sept. 23, 1985.
74. "Quarks, Gluons and Hadron Spectroscopy",  
Colloquium at Univ. of Houston, Oct. 29, 1985.
75. "Introduction to Skyrmions",  
Taiwan University, Dec. 26, 1985.
76. "Mesoniums and Glueballs",  
Tsing Hua University, Dec. 30, 1985 .

77. "Glueball Phenomenology",  
Academia Sinca,  
Taiwan, Jan. 2, 1986.
78. "Mesoniums and Glueballs",  
Institute for Theoretical Physics,  
Santa Barbara, Jan. 10, 1986.
79. "Mesoniums and Glueballs",  
CUNY/ Brooklyn, Feb. 26, 1986.
80. "Quarks, Gluons and Hadron Spectroscopy",  
Colloquium at West Virginia University, Oct. 16, 1986.
81. "Mesoniums and Glueballs",  
Colloquium at University of Arizona, Oct. 22, 1986.
82. "Mesoniums and Glueballs",  
University of Maryland, Nov. 5, 1986.
83. "Mesoniums and Glueballs",  
Brown University, Nov. 24, 1986.
84. "QCD and Hadron Spectroscopy",  
Colloquium at Virginia Polytechnic Institute, April, 2, 1987.
85. "Introduction to Skyrmion",  
Fudan University, June 17, 1987.
86. "Introduction to Skyrmion",  
University of Science and Technology,  
Hefei, June 19, 1987.
87. "Skyrmion Tree",  
Institute of High Energy Physics,  
Beijing, June 20, 1987.
88. "Skyrmion Tree",  
University of Toronto, Sept. 23, 1987.
89. "Skyrme-Landau Parametrization of Effective Interactions",  
Oak Ridge, Sept. 26, 1987.
90. "Identification of Glueballs",  
SLAC, Nov. 11, 1987.
91. "Role of Nuclear Binding in EMC Effect",  
Oak Ridge, Mar. 3, 1988.
92. "Role of Nuclear Binding in EMC Effect",  
Stony Brook, Mar. 17, 1988.

93. "Skyrmion Tree",  
Univ. of Kentucky Colloquium, April 1, 1988.
94. "Skyrmion Tree",  
Univ. of Helsinki, April 19, 1988.
95. "Skyrmion Tree",  
Niels Bohr Institute, April 22, 1988.
96. "Tensor Glueball",  
Saclay, France, May 2, 1988.
97. "Tensor Glueball Identification",  
Univ. of Kentucky, July 15, 1988.
98. "Lattice Gauge Calculations",  
SUNY/Stony Brook, Mar. 23, 1989.
99. "Tensor Glueball Identification",  
CERN, June 21, 1989.
100. "Lattice Gauge Calculations",  
Univ. of Regensburg, June 26, 1989.
101. "Glueball Identification and Lattice Results",  
Lattice Workshop at Univ. of Kentucky, July 27 - Aug. 4, 1989.
102. "Lattice Calculations of Hadron Structure",  
Taiwan University, Jan. 10, 1990.
103. "Lattice Calculations of Hadron Structure",  
Academia Sinica,  
Taiwan, Jan. 11, 1990.
104. "Large Nc QCD, Skyrmion and Meson-Exchange Models",  
Univ. of Kentucky, Feb. 26, 1990.
105. "Large Nc QCD, Skyrmion and Meson-Exchange Models",  
SUNY/Stony Brook, March 22, 1990.
106. "Hadron Structure in Lattice QCD",  
SUNY/Stony Brook, March 21, 1990.
107. "Hadron Structure in Lattice QCD",  
Hollifield Theory Users Workshop,  
Oak Ridge, March 24, 1990.
108. "Hadron Structure in Lattice Calculation",  
Oak Ridge, Jun. 21, 1990.
109. "Hadron Structure and Interaction on the Lattice",  
TRIUMF, Jul. 11, 1990.

110. "Hadron Structure and Interaction on the Lattice",  
University of Washington, Jul. 16, 1990.
111. "Large Nc QCD, Skyrmiion and Meson-exchange Models",  
University of Connecticut, Oct. 22, 1990.
112. "Nucleon Axial-Vector Form Factor on the Lattice",  
SUNY/Stony Brook, Oct. 24, 1990.
113. "Status of Glueballs",  
ITP-Stony Brook, Nov. 15, 1990.
114. "Status of Glueballs",  
Frei University,  
Berlin, Apr. 12, 1991.
115. "Lattice Calculation of Hadron Structure",  
University of T?bingen, Apr. 18, 1991.
116. "Proton Spin Crisis",  
University of Heidelberg, May 6, 1991.
117. "Axial Charge of Nucleon",  
Saclay, May 15, 1991.
118. "Proton Spin Crisis",  
HLRZ, KFA - Jülich, May 22, 1991.
119. "Proton Spin Anticrisis",  
IKP, KFA - Jülich, May 28, 1991.
120. "Proton Spin Anticrisis",  
NIKHEF, Jun. 6, 1991.
121. "Lattice Calculation of Hadron Structure",  
Workshop at Free University,  
Amsterdam, Jun. 7, 1991.
122. "Proton Spin Anticrisis",  
CERN, July 22, 1991.
123. "Proton Spin Anticrisis",  
Institute of Nuclear Theory,  
Seattle, Oct. 7, 1991.
124. "Proton Spin Anticrisis",  
UCLA, Oct. 31, 1991.
125. "Quarks, Gluons, and QCD",  
Colloquium at Univ. of Louisville, Nov. 6, 1991.
126. "Nucleon Structure from Lattice QCD",  
Inst. of High Energy Physics, Jun. 11, 1992.

127. "Nucleon Structure from Lattice QCD",  
Univ. of Science and Technology, Jun. 17, 1992.
128. "Nucleon Structure from Lattice QCD",  
Bochum, Sept. 10, 1992.
129. "Ab Initio Calculation of QCD",  
Center for Computational Sciences, Nov. 4, 1992.
130. "Violation of Gottfried Sum Rule",  
Los Alamos, Dec. 21, 1994.
131. "Origin of and Difference",  
Univ. of Cincinnati, Jan. 26, 1993.
132. "Origin of and Difference",  
SUNY/Stony Brook, Mar. 16, 1993.
133. "Nucleon Structure from Lattice QCD",  
Brookhaven Lab., Mar. 19, 1993.
134. "Nucleon Structure from Lattice QCD",  
Columbia Univ., Mar. 22, 1993.
135. "Nucleon Structure from Lattice QCD",  
SLAC, July 9, 1993.
136. "Origin of and Difference",  
Oak Ridge, Feb. 4, 1994.
137. "Quarks, Gluons, and QCD",  
Comitia,  
Univ. of Kentucky, Feb. 15, 1994.
138. "Quarks, Gluons, and QCD",  
Chung Hsing Univ., June 10, 1994.
139. "Quark Model from QCD",  
Tsing Hua Univ., June 16, 1994.
140. "Quark Model from QCD",  
Academia Sinica, June 14, 1994.
141. "Quark Model from QCD",  
Taiwan University, June 22, 1994.
142. "Everything You Want to Know About Goldberger-Treiman Relation, etc.",  
Univ. of Kentucky, Sept. 12, 1994.
143. "Quarks, Gluons, and Quantum Chromodynamics",  
Triangle Universities, Feb. 14, 1995.

144. "Flavor-Singlet  $g_A$  and  $\pi N\sigma$  Term from Lattice QCD",  
Institute of Nuclear Theory,  
Seattle, Mar. 14, 1995.
145. "Lattice Calculation of Nucleon Structure",  
Univ. Of Adelaide, Jul. 19, 1995.
146. "Nucleon Structure from Lattice QCD",  
Colloquium at Univ. Of Adelaide, Jul. 21, 1995.
147. "Nucleon Structure from Lattice QCD",  
Caltech, Jan. 24, 1996.
148. "Nucleon Structure from Lattice QCD",  
Univ. of Kentucky, Feb. 5, 1996.
149. "Nucleon Structure from Lattice QCD",  
Indiana University, Mar. 8, 1996.
150. "Nucleon Structure from Lattice QCD",  
Texas A&M, Mar. 29, 1996.
151. "Quark and Parton Models from Lattice QCD",  
Univ. of Kentucky, Aug. 26, 1996.
152. "Status of Glueballs",  
Univ. of Kentucky, Sept. 16, 1996.
153. "Quarks, Gluons, and QCD",  
Colloquium at Kent State Univ., Oct. 9, 1996.
154. "Status of Glueballs",  
Academia Sinica,  
Taipei, Nov. 18, 1996
155. "Quark and Parton Models from Lattice QCD",  
Taiwan Univ., Nov. 19, 1996
156. "Quark and Parton Models from Lattice QCD",  
SLAC, Nov. 20, 1996.
157. "Valence QCD and Quark Model",  
Colloquium at University of Virginia, Mar. 8, 1997.
158. "Parton Model from Lattice QCD",  
University of Virginia, Mar. 9, 1997.
159. "Valence QCD and Quark Model",  
University of Maryland, Sept. 26, 1997.
160. "Valence QCD and Quark Model",  
Washington University, Nov. 13, 1997.

161. "Lattice QCD and Hadron Structure",  
Colloquium at Argonne National Lab., Dec. 12, 1997.
162. "Parton Model and Lattice QCD",  
Caltech, Jan. 7, 1998.
163. "Valence QCD",  
University of Cincinnati, Feb. 24, 1998.
164. "Large  $N_c$  QCD - An Introduction",  
University of Kentucky, Sept. 21, 1998.
165. "Recent Lattice Results",  
Midwest Theorists Workshop,  
Argonne, Sept. 25, 1998.
166. "Parton Degrees of Freedom from Path-Integral Formalism", SLAC, Dec. 14, 1998.
167. "Parton Degrees of Freedom from Path-Integral Formalism", Caltech, Jan. 8, 1999.
168. "Introduction to Lattice QCD, I", Center for Theoretical Sciences, Taiwan, June 14, 1999.
169. "Introduction to Lattice QCD, II", Center for Theoretical Sciences, Taiwan, June 21, 1999.
170. "Hadron Masses and Scaling from Overlap Fermions", Lattice 1999, Pisa, Italy, June 28 – July 4, 1999.
171. "Parton Degrees of Freedom from Path-Integral Formalism", Taiwan University, Sept. 28, 1999.
172. "Parton Degrees of Freedom from Path-Integral Formalism", Michigan State University, Nov. 16, 1999.
173. "Valence QCD and Quark Model", Lawrence Berkeley Lab., Dec. 20, 1999.
174. "Neutron Suppression in Polarized Fusion Reaction", Caltech, Jan. 7, 2000.
175. "Parton Degrees of Freedom from Path-Integral Formalism", Jefferson Lab., Feb. 9, 2000.
176. "A Finite Density Algorithm with Noisy Monte Carlo", Workshop on Finite Density, Institute of Nuclear Theory, Seattle, Mar. 13 – 18, 2000.
177. "Overlap Fermions", Lattice Hadron Physics Collaboration Meeting, Jefferson Lab. June 5 – 9, 2000.
178. "Parton Degrees of Freedom from Path-Integral Formalism", Tokyo Univ., Aug. 1, 2000.
179. "Parton Degrees of Freedom from Path-Integral Formalism", Institute of High Energy Physics, Beijing, Aug. 7, 2000.
180. "Neutron Suppression in Polarized Fusion Reaction", Institute of Atomic Energy, Beijing, Aug. 8, 2000.
181. "Study of Overlap Fermions", Lattice 2000, Bangalore, India, Aug. 17 – 22, 2000.

182. "Overlap Fermions", Caltech, Jan. 1, 2001.
183. "Valence QCD and Quark Model", Univ. of Illinois, Jan. 31, 2001.
184. "Finite Density Algorithms", CCS, Univ. of Kentucky, Mar. 28, 2001.
185. "Valence QCD and Quark Model", Univ. of Pittsburgh, Apr. 5, 2001.
186. "Overlap Fermions", Fudan University, May 29, 2001.
187. "Overlap Fermions", Taiwan Univ. June 7, 2001.
188. "Kentucky Noisy Monte Carlo Algorithm"  
Lattice 2001, Berlin, Aug. 19-25, 2001
189. "Lattice Calculation with Overlap Fermions", Institute of High Energy physics, Beijing, Oct. 10, 2001.
190. "Local Chirality and Instanton Liquid Model", Caltech, Jan. 8, 2002.
191. "Chiral Symmetry and Overlap Fermion", Univ. of Maryland, May 10, 2002.
192. "A Unified Approach to Heavy and Light Quarks with Overlap Fermions", Lattice 2002, MIT, June 24-29, 2002.
193. "Chiral Behaviors with Overlap Fermion", OSU, Oct. 2, 2002.
194. "Chiral Symmetry and Overlap Fermion", Lawrence Berkeley Lab., Oct. 17, 2002.
195. "Chiral Behaviors with Overlap Fermion", Lawrence Berkeley Lab., Oct. 18, 2002.
196. "Hadron Spectroscopy", IHEP, Beijing, Oct. 21, 2002.
197. "Chiral Symmetry and Overlap Fermion" Peking Univ., Oct. 22, 2002.
198. "Chiral Symmetry and Overlap Fermion", IHEP, Beijing, Oct. 23, 2002.
199. "Chiral Symmetry and Overlap Fermion", Institute of Theoretical Physics, Oct. 28, 2002.
200. "Quenched Chiral Logs in Lattice QCD", Kellogg, Caltech, Jan. 8, 2003.
201. "Chiral Logs in Quenched QCD", Lattice 2003, Tsukuba, July 15-19, 2003.
202. "Pentaquark Search on the Lattice", Univ. of Kentucky, Dec. 11, 2003.
203. "Pentaquark States with Overlap Fermions", Caltech, Jan. 8, 2004.
204. "Pentaquark States on the Lattice", Michigan State Univ., Jan. 27, 2004.
205. "Pentaquark States on the Lattice", University of Illinois, Mar. 3, 2004.
206. "Baryon Spectroscopy and Chiral Symmetry", JLab Users Meeting, June 18, 2004.
207. "Finite Density Algorithm with Canonical Ensemble Approach", Lattice 2004, Fermilab, June 26, 2004.

208. "Chiral Symmetry and Topology from Lattice QCD", SLAC, Oct. 6, 2004.
209. "Finite Density and Mesoniums", Caltech, Jan. 6, 2005
210. "Finite Density with the Canonical Approach", SciDac meeting, Boston Univ., Jan. 10, 2005
211. "Finite Density and Mesonisums", Univ. of Kentucky, Mar. 11, 2005
212. "QCD at Finite Density and Mesonisums", UCLA, Mar. 15, 2005
213. "Lattice QCD and Multiquark Hadrons", colloquium at TUNL and Duke Univ., May 5, 2005
214. "Lattice QCD and Multiquark Hadrons", Institute of Atomic Energy, June 14, 2005
215. "Pentaquark Baryon and Tetraquark Mesoniums from Lattice QCD", Institute of Theoretical Physics, Beijing, June 21, 2005
216. "Pentaquark Baryon and Tetraquark Mesoniums from Lattice QCD", Institute of High Energy Physics, Beijing, June 22, 2005
217. "Non-exotic  $1^{-+}$  Meson", Lattice '05, Dublin, July 25 – 30, 2005
218. "Update on Finite Density and Scalar Mesons", Caltech, Jan. 18, 2006
219. "Lattice Quantum Chromodynamics", colloquium at USC, Jan. 23, 2006
220. "Introduction to Lattice QCD I", Taiwan University, May 22, 2006
221. "Introduction to Lattice QCD II", Taiwan University, May 23, 2006
222. "Lattice Quantum Chromodynamics", National Central Univ., May 30, 2006
223. "Hadron Spectroscopy from Lattice QCD", Taiwan University, May 29, 2006
224. "Parton Degree of Freedom from Path-Integral Formalism", Academia Sinica, Taipei, June 21, 2006
225. "Simulation of Gauge Action from the Overlap Operator", Lattice 06, Tucson, July 24 - 28, 2006
226. "Simulation of Gauge Action from the Overlap Operator", University of Edinburgh, Aug. 23, 2006
227. "Pentaquark Baryon and Tetraquark Mesoniums from Lattice QCD", Glasgow University, Aug. 30, 2006
228. "Simulation of Gauge Action from the Overlap Operator", DESY-Zeuthen, Sept. 26, 2006
229. "Pentaquark Baryon and Tetraquark Mesoniums from Lattice QCD", University of Graz, Graz, Oct. 23, 2006
230. "Pentaquark Baryon and Tetraquark Mesoniums from Lattice QCD", Univ. Regensburg, Oct. 24, 2006

- 231. “ $\sigma(600)$  and Pattern of Scalar Mesons”, CERN, Nov. 2, 2006
- 232. “Simulation of Gauge Action from the Overlap Operator”, Univ. of Tsukuba, Nov. 13, 2006
- 233. “Pentaquark Baryon and Tetraquark Mesoniums from Lattice QCD”, University of Tokyo, Nov. 17, 2006
- 234. “Pattern of Scalar Mesons”, Caltech, Jan. 5, 2007
- 235. “Finite Density with Canonical Approach”, SUNY/Stony Brook, Mar. 14, 2007
- 236. “Neutron Electric Dipole Moment at Fixed Topology”, Lattice 07, Regensburg, July 30-Aug.4, 2007
- 237. “Strong Interaction of Quarks and Gluons on the Lattice”, Colloquium, UK, Sept. 7, 2007
- 238. “Pattern of Light Scalar Mesons”, UK, Oct. 8, 2007
- 239. “Glue and Sea Quark Content in Nucleon”, Caltech, Jan. 18, 2008
- 240. “Quarks and Gluons on the Lattice”, Colloquium, Tata Institute, Mumbai, Jan. 30, 2008
- 241. “Lattice QCD”, graduate seminar, UK, Mar. 4, 2008
- 242. “Nucleon Form Factors and Hadron Spectroscopy”, USQCD All Hand’s Meeting, JLab, Apr. 4–5, 2008
- 243. “Roper Resonance from 2+1 Flavor Clover Fermions”, Lattice 08, Williamsburg, July 14–19, 2008
- 244. “Pattern of Light Scalar Mesons and Quark/Glue Content in the Nucleon”, JLab, Mar. 24, 2008.
- 245. “Strong Interaction of Quarks and Gluons on the Lattice”, Colloquium, School on High Energy Physics, June 27, 2008.
- 246. “Finite Density Phase Transition and Strangeness Magnetic Moment”, Caltech, Jan. 9, 2009
- 247. “Quarks, Gluons, and Quantum Chromodynamics”, UK, Feb. 17, 2009
- 248. “Finite Density Phase Transition from Lattice QCD”, STAR Collaboration, Brookhaven, Mar. 26, 2009
- 249. “Finite Density Phase Transition from Lattice QCD”, Peking University of High Energy Physics Center, June 29, 2009
- 250. “Spectrum of  $D_S$  meson and Decay Constants  $f_{D_S}$  and  $f_D$  from 2+1 Flavor Chiral Fermions’, Univ. of Kentucky, Sept. 21, 2009
- 251. “Finite Density from the Canonical Ensemble”, Taiwan University, Dec. 14, 2009

252. "Progress on Finite Density Phase Transition and Precision Lattice QCD Calculation", Caltech, Jan. 6, 2010
253. "Finite Density QCD Phase Transition from Lattice Calculation", Tokyo University, Feb. 1, 2010
254. "Quarks, Gluons, and QCD", Graduate Seminar, UK, Apr. 23, 2010
255. "Finite Density QCD Phase Transition from Lattice Calculation", University of Wisconsin, Apr. 29, 2010
256. "Nucleon Structure from Lattice QCD", UK, Sept. 27, 2010
257. "Nucleon Structure from Lattice QCD", Los Alamos, Nov. 29, 2010
258. "Finite Density QCD Phase Transition from Lattice Calculation", UCLA, Jan. 6, 2011
259. "Path-integral Formulation of Deep Inelastic Scattering and Connected Sea Partons", Michigan State University, Mar. 15, 2012
260. "Nucleon Structure and Proton Spin", UK, Mar. 31, 2011
261. "Finite Density QCD Phase Transition from Lattice Calculation", Univ. of Minnesota, Apr. 27, 2011
262. "Path-integral Formulation of Deep Inelastic Scattering and Connected Sea Partons", UK, Sept. 19, 2011
263. "Quark and Glue Momentum and Angular Momentum", UCLA, Jan. 5, 2012
264. "Nucleon Structure from Lattice QCD", University of Illinois, Apr. 30, 2012
265. "Where Does the Spin of the Proton Come from?", University of Kentucky, Sept. 6, 2012
266. "Where Does the Spin of the Proton Come from?", LBL, Jan. 18, 2013
267. "Where Does the Spin of the Proton Come from?", Academic Sinica, Apr. 12, 2013.
268. "Where Does the Spin of the Proton Come from?", Tsinghua University, Apr. 29, 2013.
269. "Connected Sea Partons", Taiwan University, May 15, 2013.
270. "Parton Distribution from Path-Integral Formalism", Nuclear Theory, Lawrence Berkeley Lab, Jan. 17, 2014
271. "Quark and Glue Components of Proton Spin and Meson Masses", MIT, Feb. 21, 2014.
272. "Quark and Glue Components of Proton Spin and Meson Masses", Triangle University seminar, NCSU, Apr. 1, 2014.
273. "Interface of Expt, Phenomenology, and Lattice QCD – Nucleon Structure of Quarks and Glue", EIC-JLab Workshop, Aug. 13-14, 2014
274. "Quark and Glue Spins in the Nucleon", University of Kentucky, Oct. 6, 2014.

275. “Quark and Glue Components of Proton Spin and Hadron Mass”, LBL, Jan. 7, 2015
276. “Quark and Glue Components of the Proton Spin”, SLAC, May 11, 2016
277. “Accelerator Based Fusion Reactor”, LBL, May 17, 2016
278. “Where do the Proton Mass and Spin Come from?”, Colloquium at University of Kentucky, Jan. 20, 2017
279. “Accelerator Based Fusion Reactor”, Taiwan University, Mar. 6, 2017
280. “PDF from the Hadronic Tensor on the Lattice and Connected Sea Evolution”, Jefferson Lab, Apr. 26, 2017
281. “Accelerator Based Fusion Reactor”, Institute of Plasma Physics, Hefei, July 24, 2017
282. “Accelerator Based Fusion Reactor”, University of Science and Technology, Hefei, July 26, 2017
283. “Accelerator Based Fusion Reactor” Nanjing University, July 29, 2017
284. “Accelerator Based Fusion Reactor” Zhejiang University, July 29, 2017
285. “Accelerator Based Fusion Reactor” Academia Sinica, Aug. 14, 2017
286. “Quark and Glue Spin – a tale of crises and puzzles”, LBL, Jan. 10, 2018
287. “Quark and Glue Spin – a tale of crises and puzzles”, University of Maryland, Feb. 7, 2018
288. “Quark and Glue Spins of the Proton”, Institute of Modern Physics, Lanzhou, May 9, 2018
289. “Proton Mass and Spin Decomposition”, University of Regensburg, Sept. 27, 2018
290. ‘Proton Mass and Spin Decomposition”, University of Mainz, Oct. 10, 2018
291. “Quark and Glue Momentum and Angular Momentum Decomposition”,  
 $\chi QCD$  collaboration meeting, UKY, Dec. 14, 2018
292. “Proton Mass and Spin Decomposition”,  
BNL, Jan. 3, 2019
293. “Proton Mass and Spin Decomposition”,  
UIUC, Mar. 25, 2019
294. “PDF for Hadronic Tensor”,  
 $\chi QCD$  collaboration meeting, UKY, Dec. 13, 2019
295. “Proton Mass and Spin Decomposition and Neutrino-Nucleon Scattering from Lattice”,  
Michigan State University, Feb. 11, 2020
296. “Quarks, Gluons, and Quantum Chromodynamics”,  
Graduate Seminar, UKY, Nov. 6, 2020
297. “Proton Mass Decomposition and Hadron Cosmological Constant”,  
 $\chi QCD$  Collaboration, Jan 10, 2021

298. "Hadron Cosmological Constant and Parton Degrees of Freedom", Michigan State University, Apr. 6, 2021
299. "Hadron Cosmological Constant and Parton Degrees of Freedom", University of Kentucky, May 3, 2021
300. "Accelerator Based Fusion Reactor", University of Rochester, Nov. 16, 2021
301. "Hadrons, Cosmological Constant, and Type II Superconductors", University of Kentucky, Mar. 30, 2022
302. "Hadrons, Cosmological Constant, and Type II Superconductors", SLAC, Oct. 5, 2022
303. "Hadrons, Cosmological Constant, and Type II Superconductors", LBNL, Oct. 12, 2022
304. "Hadrons, Type II Superconductors, and Cosmological Constant", Aix-Marseille University, Mar. 14, 2022
305. "Hadrons, Type II Superconductors, and Cosmological Constant", Regensburg University, Mar. 16, 2022
306. "Hadrons, Type II Superconductors, and Cosmological Constant", Taiwan University, Oct. 3, 2023
307. "Hadrons, Type II Superconductors, and Cosmological Constant", Institute of Theoretical Physics, AS, Oct. 10, 2023
308. "Hadrons, Type II Superconductors, and Cosmological Constant", Institute of High Energy Physics, Oct. 9, 2023
309. "Hadrons, Type II Superconductors, and Cosmological Constant", South China Normal University, Oct. 17, 2023
310. "Hadrons, Type II Superconductors, and Cosmological Constant", Institute of Physics, Academia Sinica, Oct. 26, 2023
311. "Hadrons, Type II Superconductors, and Cosmological Constant", Colloquium at Tata Institute of Fundamental Research, Feb. 15, 2024
312. "Hadrons, Type II Superconductors, and Cosmological Constant", Colloquium at University of Kentucky, Dec. 13, 2024