

# YANG MA

CP3, UCLouvain  $\diamond$  Chemin du Cyclotron 2, 1348 Louvain-la-Neuve, Belgium

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## PROFESSIONAL PREPARATION

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### Ph.D. in Physics

University of Pittsburgh, PA, U.S.A.

August 2022

Advisor: Tao Han

### M.S. in Physics

Chongqing University, Chongqing, China

June 2016

## SKILLS

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**Programming Language:** C/C++, Fortran, Python, Shell script

**Handy Programs:** Mathematica, Matlab, L<sup>A</sup>T<sub>E</sub>X, Excel, Powerpoint, Linux (OS)

**HEP Packages:** MADGRAPH5\_AMC@NLO, Pythia, FeynRules, FeynArts, FeynCalc, FormCalc, WHIZARD, ManeParse

## POSITION HELD

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### F.R.S.-FNRS Postdoctoral Fellow

Center for Cosmology, Particle Physics and Phenomenology  
Université catholique de Louvain, Belgium

October 2024 - present

### International Postdoctoral Fellow

INFN Bologna, Italy

September 2022 - September 2024

### Graduate Teaching Fellow

Dept. Physics & Astronomy, University of Pittsburgh

May 2022 - July 2022

### Graduate Research Fellow

Dept. Physics & Astronomy, University of Pittsburgh

January 2022 - April 2022

### Arts & Sciences Pre-Doctoral Fellow

Kenneth P. Dietrich School of Arts & Sciences, University of Pittsburgh

September 2020 - December 2021

### Graduate Research Assistant

Dept. Physics & Astronomy, University of Pittsburgh

January 2020 - August 2020

### Graduate Teaching Assistant

Dept. Physics & Astronomy, University of Pittsburgh

August 2016 - January 2020

## AWARDS AND HONORS

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### Outstanding Reviewer Awards 2022

Journal of Physics Communications, IOP Publishing

March 2023

### DPF Student Travel Award

APS Division of Particles and Fields (DPF)

April 2022

### Thomas-Lain Scholarship

Dept. Physics & Astronomy, University of Pittsburgh

April 2021

<b>FGSA Award for Excellence in Graduate Research</b> American Physical Society (APS)	February 2021
<b>Arts &amp; Sciences Graduate Fellowship</b> Kenneth P. Dietrich School of Arts & Sciences, University of Pittsburgh	September 2020
<b>Pitt Physics and Astronomy China Initiative (PACI) Scholarship</b> Dept. Physics & Astronomy, University of Pittsburgh	September 2016

## MEMBERSHIP IN PROFESSIONAL SOCIETIES

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American Physical Society (APS) member	March 2021 - present
International Organization of Chinese Physics & Astrophysics member	September 2021 - present
American Association for the Advancement of Science (AAAS) member	September 2021 - present
International Muon collider collaboration (IMCC) member	July 2022 - present

## SUMMER SCHOOLS ATTENDED

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|---|-------------|
| 1. <b>CTEQ 2022</b> , University of Pittsburgh<br><i>CTEQ School on QCD and Electroweak Phenomenology</i>             | July 2022   |
| 2. <b>SSI 2021</b> , SLAC<br><i>49th SLAC SUMMER INSTITUTE: The Higgs State Fair</i>                                  | August 2021 |
| 3. <b>HCPSS 2020</b> , Fermilab<br><i>15th annual Fermilab-CERN Hadron Collider Physics Summer School</i>             | August 2020 |
| 4. <b>TASI 2020</b> , University of Colorado Boulder<br><i>The Obscure Universe: Neutrinos and Other Dark Matters</i> | June 2020   |
| 5. <b>CTEQ 2019</b> , University of Pittsburgh<br><i>CTEQ School on QCD and Electroweak Phenomenology</i>             | July 2019   |
| 6. <b>CTEQ 2017</b> , University of Pittsburgh<br><i>CTEQ School on QCD and Electroweak Phenomenology</i>             | July 2017   |

## REFeree SERVICE

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- Physical Review Letters (*Phys. Rev. Lett.*)  $\times 1$
- Physical Review D (*Phys. Rev. D*)  $\times 1$
- Chinese Physics C (*CPC*)  $\times 3$
- The European Physical Journal C (*Eur. Phys. J. C*)  $\times 1$
- Journal of Physics Communications (*J. Phys. Commun.*)  $\times 1$
- Journal of Physics G: Nuclear and Particle Physics (*J. Phys. G*)  $\times 2$
- Nuclear Physics B (*Nucl. Phys. B*)  $\times 1$
- Machine Learning: Science and Technology (*MLST*)  $\times 1$

## TEACHING EXPERIENCE

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### Graduate Teaching Fellow (instructor) at the University of Pittsburgh

- PHYS 0174 - *Basic Physics, Science and Engineering 1*, Summer 2022  
Covers Mechanics and Wave

### Graduate Teaching Assistant at the University of Pittsburgh

- PHYS 0219 - *Basic Laboratory Physics for Science and Engineering*  
Fall 2016, Spring 2017, and Fall 2018
- PHYS 0212 - *Introduction to Laboratory Physics*  
Fall 2017, Spring 2018, and Summer 2018
- PHYS 0110 - *Introduction to Physics 1*, Summer 2018  
Covers Mechanics, Heat and Thermodynamics, and Waves
- PHYS 0111 - *Introduction to Physics 2*, Summer 2017  
Covers Thermodynamics, Electromagnetism, Optics, Special Relativity, and Quantum Physics
- PHYS 0175 - *Basic Physics, Science and Engineering 2*, Spring 2019 and Summer 2021  
Covers Electromagnetism, Elementary Quantum Mechanics, and Atomic Structure

### Graduate Teaching Assistant at Chongqing University

- College Physics I - *Classical Mechanics and Electromagnetism*, Spring 2014
- College Physics II - *Thermodynamics, Optics and Special Relativity*, Fall 2013

## MENTORING EXPERIENCE

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- Dept. Physics & Astronomy Graduate Student Mentor August 2021 - May 2022  
Mentor three first year graduate students
- Assist to guide one visiting graduate student (*Xiaozhe Tan*) December 2019 - December 2020  
(*JHEP* **08** (2022) 073 [2202.08273])
- Assist to guide one visiting undergraduate student June 2019 - August 2019

## PUBLICATIONS IN REFEREED JOURNALS

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1. S.-s. Bao, Y. Ma, Y. Wu, K. Xie and H. Zhang, *Light Axion-Like Particles at Future Lepton Colliders*, [2505.10023](#).
2. Y. Ma, D. Pagani and M. Zaro, *EW corrections and heavy boson radiation at a high-energy muon collider*, *Phys. Rev. D* **111** (2025) 053002 [[2409.09129](#)].
3. Y. Ma and Z. Wang, *New probe of dark matter-baryon interactions in compact stellar systems*, *Phys. Rev. D* **111** (2025) L061302 [[2408.01818](#)].
4. E. Celada, T. Han, W. Kilian, N. Kreher, Y. Ma, F. Maltoni et al., *Probing Higgs-muon interactions at a multi-TeV muon collider*, *JHEP* **08** (2024) 021 [[2312.13082](#)].
5. C. Accettura et al., *Towards a muon collider*, *Eur. Phys. J. C* **83** (2023) 864 [[2303.08533](#)].
6. T. Han, A. K. Leibovich, Y. Ma and X.-Z. Tan, *Higgs boson decay to charmonia via c-quark fragmentation*, *JHEP* **08** (2022) 073 [[2202.08273](#)].

7. T. Han, W. Kilian, N. Kreher, Y. Ma, J. Reuter, T. Striegl et al., *Precision Test of the Muon-Higgs Coupling at a High-energy Muon Collider*, *JHEP* **12** (2021) 162 [[2108.05362](#)].
8. D. Buarque et al., *Vector Boson Scattering Processes: Status and Prospects*, *Rev. Phys.* **8** (2022) 100071 [[2106.01393](#)].
9. T. Han, Y. Ma and K. Xie, *Quark and gluon contents of a lepton at high energies*, *JHEP* **02** (2022) 154 [[2103.09844](#)].
10. T. Han, Y. Ma and K. Xie, *High energy leptonic collisions and electroweak parton distribution functions*, *Phys. Rev. D* **103** (2021) L031301 [[2007.14300](#)].
11. Z. Sun and Y. Ma, *Inclusive productions of  $\Upsilon(1S, 2S, 3S)$  and  $\chi_b(1P, 2P, 3P)$  via the Higgs boson decay*, *Phys. Rev. D* **100** (2019) 094019 [[1909.08548](#)].
12. Z. Sun, X.-G. Wu, Y. Ma and S. J. Brodsky, *Exclusive production of  $J/\psi + \eta_c$  at the B factories Belle and Babar using the principle of maximum conformality*, *Phys. Rev. D* **98** (2018) 094001 [[1807.04503](#)].
13. Y. Ma and X.-G. Wu, *Renormalization scheme dependence of high-order perturbative QCD predictions*, *Phys. Rev. D* **97** (2018) 036024 [[1707.09886](#)].
14. J.-M. Shen, X.-G. Wu, Y. Ma and S. J. Brodsky, *The Generalized Scheme-Independent Crewther Relation in QCD*, *Phys. Lett. B* **770** (2017) 494 [[1611.07249](#)].
15. H.-Y. Bi, X.-G. Wu, Y. Ma, H.-H. Ma, S. J. Brodsky and M. Mojaza, *Degeneracy Relations in QCD and the Equivalence of Two Systematic All-Orders Methods for Setting the Renormalization Scale*, *Phys. Lett. B* **748** (2015) 13 [[1505.04958](#)].
16. H.-H. Ma, X.-G. Wu, Y. Ma, S. J. Brodsky and M. Mojaza, *Setting the renormalization scale in perturbative QCD: Comparisons of the principle of maximum conformality with the sequential extended Brodsky-Lepage-Mackenzie approach*, *Phys. Rev. D* **91** (2015) 094028 [[1504.01260](#)].
17. Y. Ma, X.-G. Wu, H.-H. Ma and H.-Y. Han, *General Properties on Applying the Principle of Minimum Sensitivity to High-order Perturbative QCD Predictions*, *Phys. Rev. D* **91** (2015) 034006 [[1412.8514](#)].
18. H.-B. Fu, X.-G. Wu and Y. Ma,  *$B \rightarrow K^*$  Transition Form Factors and the Semi-leptonic Decay  $B \rightarrow K^* \mu^+ \mu^-$* , *J. Phys. G* **43** (2016) 015002 [[1411.6423](#)].
19. H.-B. Fu, X.-G. Wu, H.-Y. Han, Y. Ma and H.-Y. Bi, *The  $\rho$ -meson longitudinal leading-twist distribution amplitude*, *Phys. Lett. B* **738** (2014) 228 [[1409.3053](#)].
20. G. Chen, X.-G. Wu, Z. Sun, Y. Ma and H.-B. Fu, *Photoproduction of doubly heavy baryon at the ILC*, *JHEP* **12** (2014) 018 [[1408.4615](#)].
21. H.-B. Fu, X.-G. Wu, H.-Y. Han and Y. Ma,  *$B \rightarrow \rho$  transition form factors and the  $\rho$ -meson transverse leading-twist distribution amplitude*, *J. Phys. G* **42** (2015) 055002 [[1406.3892](#)].
22. X.-G. Wu, Y. Ma, S.-Q. Wang, H.-B. Fu, H.-H. Ma, S. J. Brodsky et al., *Renormalization Group Invariance and Optimal QCD Renormalization Scale-Setting*, *Rept. Prog. Phys.* **78** (2015) 126201 [[1405.3196](#)].
23. S.-Q. Wang, X.-G. Wu, J.-M. Shen, H.-Y. Han and Y. Ma, *QCD improved electroweak parameter  $\rho$* , *Phys. Rev. D* **89** (2014) 116001 [[1402.0975](#)].
24. Z. Sun, X.-G. Wu, G. Chen, Y. Ma, H.-H. Ma and H.-Y. Bi, *Bottomonium production associated with a photon at a high luminosity  $e^+e^-$  collider with the one-loop QCD correction*, *Phys. Rev. D* **89** (2014) 074035 [[1401.2735](#)].

25. H.-B. Fu, X.-G. Wu, H.-Y. Han, Y. Ma and T. Zhong,  $|V_{cb}|$  from the semileptonic decay  $B \rightarrow D\ell\bar{\nu}_\ell$  and the properties of the  $D$  meson distribution amplitude, *Nucl. Phys. B* **884** (2014) 172 [[1309.5723](#)].

## OTHER PUBLICATIONS

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1. INTERNATIONAL MUON COLLIDER collaboration, *The Muon Collider*, [2504.21417](#).
2. MUCoL collaboration, *MuCol Milestone Report No. 5: Preliminary Parameters*, [2411.02966](#).
3. Y. Ma, E. Celada, T. Han, W. Kilian, N. Kreher, F. Maltoni et al., *Higgs-muon interactions at a multi-TeV muon collider*, *PoS ICHEP2024* (2024) 092 [[2410.06991](#)].
4. INTERNATIONAL MUON COLLIDER collaboration, *Interim report for the International Muon Collider Collaboration (IMCC)*, [2407.12450](#).
5. CEPC STUDY GROUP collaboration, *CEPC Technical Design Report: Accelerator*, *Radiat. Detect. Technol. Methods* **8** (2024) 1 [[2312.14363](#)].
6. J. Reuter, T. Han, W. Kilian, N. Kreher, Y. Ma, T. Striegl et al., *Precision test of the muon-Higgs coupling at a high-energy muon collider*, *PoS ICHEP2022* (2022) 1239 [[2212.01323](#)].
7. T. Han, A. K. Leibovich, Y. Ma and X.-Z. Tan, *Higgs decay to charmonia and the charm-quark Yukawa coupling*, *PoS ICHEP2022* (2022) 517 [[2211.10727](#)].
8. K. M. Black et al., *Muon Collider Forum report*, *JINST* **19** (2024) T02015 [[2209.01318](#)].
9. T. Han, Y. Ma and K. Xie, *Electroweak fragmentation at high energies: A Snowmass White Paper*, in *Snowmass 2021*, 3, 2022, [2203.11129](#).
10. J. M. Campbell et al., *Event Generators for High-Energy Physics Experiments*, *SciPost Phys.* **16** (2024) 130 [[2203.11110](#)].
11. C. Aime et al., *Muon Collider Physics Summary*, [2203.07256](#).
12. MUON COLLIDER collaboration, *The physics case of a 3 TeV muon collider stage*, [2203.07261](#).
13. ILC INTERNATIONAL DEVELOPMENT TEAM collaboration, *The International Linear Collider: Report to Snowmass 2021*, [2203.07622](#).

## SEMINARS AND COLLOQUIUM

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|---|---------------|
| 1. <i>Precision physics at the future muon colliders</i><br>Theory Colloquium, DESY, Germany  | May 2025      |
| 2. <i>Probe the Yukawa interactions of the 2nd generation fermions at high-energy colliders</i><br>TDLI/INPAC Joint Theory Seminar, Shanghai Jiao Tong University | July 2024     |
| 3. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i><br>HEP Seminar, Nankai University   | December 2023 |
| 4. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i><br>HEP Seminar, Chongqing University  | December 2023 |
| 5. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i><br>HEP Seminar, Central South University                                      | December 2023 |
| 6. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i><br>HEP Seminar, Hunan University  | December 2023 |

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| 7. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i><br>HEP Seminar, Shandong University   | December 2023 |
| 8. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i><br>HEP Seminar, University of Science and Technology of China (USTC)                            | December 2023 |
| 9. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i><br>HEP Seminar, Nanjing Normal University   | December 2023 |
| 10. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i><br>HEP Seminar, Southeast University   | December 2023 |
| 11. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i><br>HEP Seminar, Fudan University   | December 2023 |
| 12. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i><br>HEP Seminar, Nanjing University   | December 2023 |
| 13. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i><br>HEP Seminar, Tsung-Dao Lee Institute (TDLI), Shanghai Jiao Tong University                  | December 2023 |
| 14. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i><br>HEP Seminar, Tsinghua University  | November 2023 |
| 15. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i><br>HEP Seminar, Peking University  | November 2023 |
| 16. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i><br>HEP Seminar, Institute of Theoretical Physics, Chinese Academy of Sciences                  | November 2023 |
| 17. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i><br>HEP Theory Seminar, IHEP, Chinese Academy of Sciences                                       | November 2023 |
| 18. <i>Bread and butter physics at future multi-TeV lepton colliders</i><br>NHETC Theory Seminar, Rutgers University  | May 2023      |
| 19. <i>Measuring the Yukawa couplings: Towards the 2nd generation fermions</i><br>HEP Lunch Seminar, University of Chicago  | May 2023      |
| 20. <i>Electroweak Tevatron: High-Energy lepton colliders</i><br>Theoretical Physics Seminar, Fermilab  | May 2023      |
| 21. <i>Bread and butter physics at future multi-TeV lepton colliders</i><br>LEPP Theory Seminar, Cornell University   | May 2023      |
| 22. <i>Measuring the Yukawa couplings: Towards the 2nd generation fermions</i><br>HEP Theory Seminar, University at Buffalo   | May 2023      |
| 23. <i>Determine the Yukawa couplings of the second generation fermions<br/>at high-energy colliders</i><br>(Remote) HEP Theory Seminar, Argonne National Laboratory (ANL)          | January 2023  |
| 24. <i>Determine the Yukawa couplings of the second generation fermions<br/>at high-energy colliders</i><br>(Remote) TDLI/INPAC Joint Theory Seminar, Shanghai Jiao Tong University | December 2022 |
| 25. <i>Determine the Yukawa couplings of the second generation fermions<br/>at high-energy colliders</i><br>(Remote) Particle Physics Seminar, Chongqing University                 | December 2022 |

26. <i>Determine the Yukawa couplings of the second generation fermions at high-energy colliders</i> (Remote) Theoretical Physics Seminar, Shandong University	December 2022
27. <i>Phenomenology at high-energy colliders</i> Bologna HEP Theory Journal Club, INFN Bologna & University of Bologna	November 2022
28. <i>The partonic picture and the SM expectation of high-energy lepton colliders</i> HEP Seminar, University of Notre Dame	September 2022
29. <i>The partonic picture and the SM expectation of high-energy lepton colliders</i> HEP Seminar, University of Wisconsin-Madison	September 2022
30. <i>The partonic picture and the SM expectation of high-energy lepton colliders</i> HEP Special Seminar, University of Michigan	September 2022
31. <i>The partonic picture and the SM expectation of high-energy lepton colliders</i> HEP Seminar, Northwestern University	September 2022
32. <i>Higgs decay to charmonia and the charm-quark Yukawa coupling</i> HEP Seminar, Michigan State University	September 2022
33. <i>Higgs decay to charmonia and the charm-quark Yukawa coupling</i> HEP Seminar, Washington University in St. Louis	September 2022
34. <i>The partonic picture and the SM expectation of high-energy lepton colliders</i> HEP Seminar, University of Minnesota	August 2022
35. <i>Higgs decay to <math>J/\psi</math> via <math>c</math>-quark fragmentation</i> (Remote) Nuclear Physics Seminar, UCLA	May 2022
36. <i>Higgs decay to charmonia and the charm quark Yukawa</i> PITT PACC Group Seminar, University of Pittsburgh	March 2022
37. <i>Multi-boson production and the muon Yukawa coupling</i> (Remote) HEP Journal Club, University of Utah	October 2021
38. <i>Multi-boson production and the muon Yukawa coupling</i> PITT PACC Group Seminar, University of Pittsburgh	September 2021
39. <i>Parton contents of a lepton at high energies</i> (Remote) Particle Theory Seminar, Carleton University	May 2021
40. <i>The partonic picture at high-energy lepton colliders</i> (Remote) SLAC EPP Theory Seminar, SLAC	April 2021
41. <i>The partonic picture at high-energy lepton colliders</i> (Remote) Particle Theory Seminar, Shandong University	April 2021
42. <i>Parton contents of a lepton at high energies</i> (Remote) HEP Seminar, Oklahoma State University	April 2021
43. <i>QCD jet production at high energy lepton colliders</i> (Remote) PITT PACC Group Seminar, University of Pittsburgh	March 2021
44. <i>High energy lepton collisions and electroweak PDFs</i> (Remote) Particle Theory Seminar, Carleton University	October 2020
45. <i>High energy lepton collisions and electroweak PDFs</i> (Remote) PITT PACC Group Seminar, University of Pittsburgh	September 2020

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|---|--------------|
| 46. <i>How much do we need polarized PDFs?</i><br>PITT PACC Group Seminar, University of Pittsburgh   | October 2019 |
| 47. <i>Renormalization scheme uncertainties in high order perturbative QCD results</i><br>PITT PACC Group Seminar, University of Pittsburgh | March 2019   |

## CONFERENCE AND WORKSHOP TALKS

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|--|----------------|
| 1. <i>Light Axion-Like Particles at Future Lepton Colliders</i><br>Parallel talk at Pheno 2025, University of Pittsburgh   | May 2025       |
| 2. <i>Probing electroweak NLO corrections and Sudakov logarithms at multi-TeV muon colliders</i><br>Parallel talk at IMCC and MuCol Annual Meeting 2025, DESY, Germany | May 2025       |
| 3. <i>Precision physics at the future muon collider</i><br>MADGRAPH5_aMC@NLO meeting 2025, CERN  | February 2025  |
| 4. <i>Higgs-muon interactions at a multi-TeV muon collider</i><br>Parallel talk at Higgs 2024, Uppsala University, Sweden  | November 2024  |
| 5. <i>Charm and bottom Yukawa couplings via quarkonia production at HL-LHC</i><br>Parallel talk at Higgs 2024, Uppsala University, Sweden                              | November 2024  |
| 6. <i>Electroweak radiation picture of the future multi-TeV muon collider</i><br>Early Career Researchers & Muon Colliders (Online Event)                              | August 2024    |
| 7. <i>Higgs-muon interactions at a multi-TeV muon collider</i><br>Parallel talk at ICHEP 2024, Prague, Czech Republic  | July 2024      |
| 8. <i>Towards a Muon Collider: III. Higgs Physics</i><br>Frontier Physics Working Month, South China Normal University   | June 2024      |
| 9. <i>Towards a Muon Collider: II. The Partonic Picture</i><br>Frontier Physics Working Month, Shandong University (Qingdao)   | June 2024      |
| 10. <i>Towards a Muon Collider: I. The General Picture</i><br>Frontier Physics Working Month, Peking University  | June 2024      |
| 11. <i>Probing Higgs-Muon Interactions at Multi-TeV Collider</i><br>Parallel talk at IMCC and MuCol Annual Meeting 2024, CERN  | March 2024     |
| 12. <i>Multiple boson production at high-energy muon colliders to probe the Higgs-muon coupling</i><br>Parallel talk at Higgs 2023, IHEP, Beijing                      | December 2023  |
| 13. <i>Higgs decay to quarkonia and the Yukawa couplings</i><br>Parallel talk at Higgs 2023, IHEP, Beijing   | November 2023  |
| 14. <i>Muon colliders and Weak PDFs</i><br>MADGRAPH5_aMC@NLO meeting 2023, Gargnano, Lake Garda, Italy   | September 2023 |
| 15. <i>Muon Yukawa couplings at the high-energy muon collider</i><br>Parallel talk at Pheno 2023, University of Pittsburgh   | May 2023       |
| 16. <i>Electroweak LHC: High-energy lepton colliders</i><br>Invited talk at PIKIMO Spring 2023, Ohio State University  | April 2023     |
| 17. <i>EW and QCD physics at the muon collider</i><br>Parallel talk at Milan Christmas Meeting 2022, Milan, Italy  | December 2022  |



18. *Higgs decay to charmonia and the charm-quark Yukawa coupling* November 2022  
Parallel talk at the Higgs 2022 Conference, Pisa, Italy
19. *EW and QCD physics at the muon collider* October 2022  
Parallel talk at Muon Collider Collaboration Meeting 2022, CERN
20. *Higgs decay to charmonia via c-quark fragmentation* September 2022  
Invited plenary talk at QWG 2022, GSI Darmstadt, Germany
21. *Higgs decay to charmonia and the charm-quark Yukawa coupling* September 2022  
(Remote) Invited talk at the SYSU-PKU Collider Physics forum For Young Scientists
22. *Higgs decay to  $J/\psi$  via c-quark fragmentation* July 2022  
(Remote) Parallel talk at ICHEP 2022, Bologna, Italy
23. *Higgs decay to  $J/\psi$  via c-quark fragmentation* May 2022  
Parallel talk at Pheno 2022, University of Pittsburgh
24. *Multi-boson production and the muon Yukawa coupling* April 2022  
Contributed talk at APS April Meeting 2022, New York
25. *Multi-boson production and the muon Yukawa coupling* December 2021  
PIKIMO 11, University of Pittsburgh
26. *Electroweak parton distributions and fragmentations for high-energy lepton colliders* October 2021  
(Remote) Snowmass EF04 Topical Group Community Meeting
27. *Higgs boson decay to  $J/\psi$  via c-quark fragmentation* October 2021  
(Remote) Parallel talk at Higgs 2021 Conference, Stony Brook University
28. *The partonic picture at high-energy lepton colliders* August 2021  
(Remote) Parallel talk at SUSY 2021, Shanghai
29. *QCD jet production at a high energy muon collider* July 2021  
(Remote) Parallel talk at EPS-HEP 2021, DESY
30. *Quark and gluon contents of a lepton at high energies* July 2021  
(Remote) Parallel talk at the DPF meeting, Florida State University
31. *Quark and gluon contents of a lepton at high energies* May 2021  
(Remote) Parallel talk at Pheno 2021, University of Pittsburgh
32. *The partonic picture at high-energy lepton colliders* May 2021  
(Remote) Parallel talk at PPC 2021, University of Oklahoma
33. *Electroweak parton distribution functions at a high-energy muon collider* April 2021  
(Remote) Contributed talk at APS April Meeting 2021
34. *QCD jet production at a high energy muon collider* March 2021  
(Remote) Talk at Muon Collider Physics and Simulation Meeting, CERN
35. *The electroweak parton distribution functions - Necessity and application* June 2020  
(Remote) Student talk at Theoretical Advanced Study Institute (TASI 2020)
36. *The electroweak parton distribution functions* May 2020  
(Remote) Parallel talk at Pheno 2020, University of Pittsburgh
37. *QCD Scale-setting problem in Future Chinese Collider physics* September 2015  
Parallel talk at CEPC-SppC Study Group Meeting, IHEP, Beijing

## CONFERENCES AND WORKSHOPS ATTENDED

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| 1. Phenomenology Symposium 2025 (Pheno 2025), University of Pittsburgh   | May 2025       |
| 2. IMCC and MuCol Annual Meeting 2025, DESY, Germany   | May 2025       |
| 3. MADGRAPH5_aMC@NLO meeting 2025, CERN  | February 2025  |
| 4. Higgs 2024, Uppsala University, Sweden  | November 2024  |
| 5. Early Career Researchers & Muon Colliders (Online Event)  | August 2024    |
| 6. The 42nd International Conference on High Energy Physics (ICHEP 2024)<br>Prague, Czech Republic                                     | July 2024      |
| 7. Frontier Physics Working Month 2024, Peking University  | June 2024      |
| 8. IMCC and MuCol Annual Meeting 2024, CERN  | March 2024     |
| 9. Higgs 2023, IHEP, Beijing   | November 2023  |
| 10. MADGRAPH5_aMC@NLO meeting 2023, Gargnano, Lake Garda, Italy  | September 2023 |
| 11. Muon Collider Collaboration Meeting 2023, IJCLab in Orsay, France  | May 2023       |
| 12. Phenomenology Symposium 2023 (Pheno 2023), University of Pittsburgh  | May 2023       |
| 13. PIKIMO Spring 2023, Ohio State University  | April 2023     |
| 14. Milan Christmas Meeting 2022, Milan, Italy   | December 2022  |
| 15. Higgs 2022, Pisa, Italy  | November 2022  |
| 16. Muon Collider Collaboration Meeting 2022, CERN   | October 2022   |
| 17. The 15th International Workshop on Heavy Quarkonium (QWG 2022)<br>GSI Darmstadt, Germany   | September 2022 |
| 18. SYSU-PKU Collider Physics forum For Young Scientists (remote)  | September 2022 |
| 19. Snowmass Community Summer Study Workshop (Snowmass 2022), Seattle  | July 2022      |
| 20. XLI International Conference on High Energy Physics (ICHEP 2022), Bologna, Italy   | July 2022      |
| 21. LoopFest XX, University of Pittsburgh  | May 2022       |
| 22. Phenomenology Symposium 2022 (Pheno 2022), University of Pittsburgh  | May 2022       |
| 23. APS April Meeting 2022, New York   | April 2022     |
| 24. PIKIMO 11, University of Pittsburgh (hybrid)   | December 2021  |
| 25. Higgs 2021<br>Stony Brook University & Brookhaven National Laboratory (remote)   | October 2021   |
| 26. The XXVIII International Conference on Supersymmetry and Unification of<br>Fundamental Interactions (SUSY 2021), Shanghai (remote) | August 2021    |
| 27. European Physical Society Conference on High Energy Physics 2021 (EPS-HEP 2021)<br>DESY (remote)                                   | July 2021      |
| 28. 2021 Meeting of the Division of Particles and Fields of the APS (DPF21)<br>Florida State University (remote)                       | July 2021      |
| 29. Phenomenology Symposium 2021 (Pheno 2021)<br>University of Pittsburgh (remote)   | May 2021       |

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| 30. XIV International Workshop on Interconnections between Particle Physics and Cosmology (PPC 2021), University of Oklahoma (remote) | May 2021       |
| 31. APS April Meeting 2021 (remote)   | April 2021     |
| 32. Muon Collider Physics and Simulation Meeting (remote)   | March 2021     |
| 33. PITT PACC Workshop: Muon collider physics<br>University of Pittsburgh (remote)  | November 2020  |
| 34. Phenomenology Symposium 2020 (Pheno 2020)<br>University of Pittsburgh (remote)  | May 2020       |
| 35. Phenomenology Symposium 2020 (Pheno 2019), University of Pittsburgh   | May 2019       |
| 36. PITT PACC Workshop: BSM circa 2020, University of Pittsburgh  | March 2019     |
| 37. Phenomenology Symposium 2020 (Pheno 2018), University of Pittsburgh   | May 2018       |
| 38. Phenomenology Symposium 2020 (Pheno 2017), University of Pittsburgh   | May 2017       |
| 39. The CEPC-SppC Study Group Meeting<br>Institute of High Energy Physics (IHEP), Beijing   | September 2015 |