

YANG MA

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

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PROFESSIONAL PREPARATION

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

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

Handy Programs: Mathematica, Matlab, L^AT_EX, Excel, Powerpoint, Linux (OS)

HEP Packages: MADGRAPH5_AMC@NLO, Pythia, FeynRules, FeynArts, FeynCalc, FormCalc, WHIZARD, ManeParse

POSITION HELD

F.R.S.-FNRS Postdoctoral Fellow (Chargé de recherches)

October 2024 - present

Center for Cosmology, Particle Physics and Phenomenology (CP3)

Université catholique de Louvain (UCLouvain), Belgium

Individual research fellowship awarded by the Belgian National Fund for Scientific Research (F.R.S.-FNRS).

International Postdoctoral Fellow

September 2022 - September 2024

INFN Sezione di Bologna, Italy

Awarded through a nationwide competition (1 of only 16 positions across all INFN divisions in Italy).

Graduate Teaching Fellow

May 2022 - July 2022

Dept. Physics & Astronomy, University of Pittsburgh

Graduate Research Fellow

January 2022 - April 2022

Dept. Physics & Astronomy, University of Pittsburgh

Arts & Sciences Pre-Doctoral Fellow

September 2020 - December 2021

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

Graduate Research Assistant

January 2020 - August 2020

Dept. Physics & Astronomy, University of Pittsburgh

Graduate Teaching Assistant

August 2016 - January 2020

Dept. Physics & Astronomy, University of Pittsburgh

AWARDS AND HONORS

Outstanding Reviewer Awards 2022

March 2023

Journal of Physics Communications, IOP Publishing

DPF Student Travel Award

April 2022

APS Division of Particles and Fields (DPF)

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

MEMBERSHIP IN PROFESSIONAL SOCIETIES

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

REFeree SERVICE

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

TEACHING EXPERIENCE

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

- Dept. Physics & Astronomy Graduate Student Mentor August 2021 - May 2022
Mentor three first year graduate students
- Assist to guide one visiting graduate student (*Xiaoze 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

1. P. Brecht, T. Banno, M. Höfer, S. Iguro, W. Kilian, Y. Ma et al., *Chasing the two-Higgs-doublet model via electroweak corrections at e^+e^- colliders*, **2509.05421**.
2. F. Kling, Y. Ma, K. Mękała, J. Reuter and Z. Tabrizi, *Non-Standard Neutrino Interactions at a Muon Collider Neutrino Detector*, **2508.00761**.
3. S.-s. Bao, Y. Ma, Y. Wu, K. Xie and H. Zhang, *Light Axion-Like Particles at Future Lepton Colliders*, *JHEP* **10** (2025) 122 [2505.10023].
4. 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].
5. Y. Ma and Z. Wang, *New probe of dark matter-baryon interactions in compact stellar systems*, *Phys. Rev. D* **111** (2025) L061302 [2408.01818].
6. 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].
7. C. Accettura et al., *Towards a muon collider*, *Eur. Phys. J. C* **83** (2023) 864 [2303.08533].
8. 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].
9. 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].
10. D. Buarque et al., *Vector Boson Scattering Processes: Status and Prospects*, *Rev. Phys.* **8** (2022) 100071 [2106.01393].
11. T. Han, Y. Ma and K. Xie, *Quark and gluon contents of a lepton at high energies*, *JHEP* **02** (2022) 154 [2103.09844].
12. T. Han, Y. Ma and K. Xie, *High energy leptonic collisions and electroweak parton distribution functions*, *Phys. Rev. D* **103** (2021) L031301 [2007.14300].

13. 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](#)].
14. 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](#)].
15. Y. Ma and X.-G. Wu, *Renormalization scheme dependence of high-order perturbative QCD predictions*, *Phys. Rev. D* **97** (2018) 036024 [[1707.09886](#)].
16. 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](#)].
17. 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](#)].
18. 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](#)].
19. 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](#)].
20. 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](#)].
21. H.-B. Fu, X.-G. Wu, H.-Y. Han, Y. Ma and H.-Y. Bi, *The ρ -meson longitudinal leading-twist distribution amplitude*, *Phys. Lett. B* **738** (2014) 228 [[1409.3053](#)].
22. 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](#)].
23. H.-B. Fu, X.-G. Wu, H.-Y. Han and Y. Ma, *$B \rightarrow \rho$ transition form factors and the ρ -meson transverse leading-twist distribution amplitude*, *J. Phys. G* **42** (2015) 055002 [[1406.3892](#)].
24. 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](#)].
25. S.-Q. Wang, X.-G. Wu, J.-M. Shen, H.-Y. Han and Y. Ma, *QCD improved electroweak parameter ρ* , *Phys. Rev. D* **89** (2014) 116001 [[1402.0975](#)].
26. 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](#)].
27. 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

1. MuCoL collaboration, *MuCol Milestone Report No. 7: Consolidated Parameters*, [2510.27437](#).
2. CEPC STUDY GROUP collaboration, *CEPC Technical Design Report - Reference Detector*, [2510.05260](#).

3. J. Altmann et al., *ECFA Higgs, electroweak, and top Factory Study*, vol. 5/2025 of *CERN Yellow Reports: Monographs*. 6, 2025, [10.23731/CYRM-2025-005](#), [[2506.15390](#)].
4. INTERNATIONAL MUON COLLIDER collaboration, *The Muon Collider*, [2504.21417](#).
5. MuCoL collaboration, *MuCol Milestone Report No. 5: Preliminary Parameters*, [2411.02966](#).
6. 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](#)].
7. INTERNATIONAL MUON COLLIDER collaboration, *Interim report for the International Muon Collider Collaboration (IMCC)*, [2407.12450](#).
8. CEPC STUDY GROUP collaboration, *CEPC Technical Design Report: Accelerator*, *Radiat. Detect. Technol. Methods* **8** (2024) 1 [[2312.14363](#)].
9. 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](#)].
10. 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](#)].
11. K. M. Black et al., *Muon Collider Forum report*, *JINST* **19** (2024) T02015 [[2209.01318](#)].
12. T. Han, Y. Ma and K. Xie, *Electroweak fragmentation at high energies: A Snowmass White Paper*, in *Snowmass 2021*, 3, 2022, [2203.11129](#).
13. J. M. Campbell et al., *Event Generators for High-Energy Physics Experiments*, *SciPost Phys.* **16** (2024) 130 [[2203.11110](#)].
14. C. Aime et al., *Muon Collider Physics Summary*, [2203.07256](#).
15. MUON COLLIDER collaboration, *The physics case of a 3 TeV muon collider stage*, [2203.07261](#).
16. ILC INTERNATIONAL DEVELOPMENT TEAM collaboration, *The International Linear Collider: Report to Snowmass 2021*, [2203.07622](#).

SEMINARS AND COLLOQUIUM

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- | | |
|---|---------------|
| 1. <i>A New Frontier: Charting the Course for a 10 TeV Muon Collider</i>
SOTU Seminar, Tata Institute of Fundamental Research, Mumbai, India | October 2025 |
| 2. <i>Precision physics at the future muon colliders</i>
Theory Colloquium, DESY, Germany | May 2025 |
| 3. <i>Probe the Yukawa interactions of the 2nd generation fermions at high-energy colliders</i>
TDLI/INPAC Joint Theory Seminar, Shanghai Jiao Tong University | July 2024 |
| 4. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i>
HEP Seminar, Nankai University | December 2023 |
| 5. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i>
HEP Seminar, Chongqing University | December 2023 |
| 6. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i>
HEP Seminar, Central South University | December 2023 |
| 7. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i>
HEP Seminar, Hunan University | December 2023 |

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| 8. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i>
HEP Seminar, Shandong University | December 2023 |
| 9. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i>
HEP Seminar, University of Science and Technology of China (USTC) | December 2023 |
| 10. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i>
HEP Seminar, Nanjing Normal University | December 2023 |
| 11. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i>
HEP Seminar, Southeast University | December 2023 |
| 12. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i>
HEP Seminar, Fudan University | December 2023 |
| 13. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i>
HEP Seminar, Nanjing University | December 2023 |
| 14. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i>
HEP Seminar, Tsung-Dao Lee Institute (TDLI), Shanghai Jiao Tong University | December 2023 |
| 15. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i>
HEP Seminar, Tsinghua University | November 2023 |
| 16. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i>
HEP Seminar, Peking University | November 2023 |
| 17. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i>
HEP Seminar, Institute of Theoretical Physics, Chinese Academy of Sciences | November 2023 |
| 18. <i>Physics opportunities and challenges at future multi-TeV lepton colliders</i>
HEP Theory Seminar, IHEP, Chinese Academy of Sciences | November 2023 |
| 19. <i>Bread and butter physics at future multi-TeV lepton colliders</i>
NHETC Theory Seminar, Rutgers University | May 2023 |
| 20. <i>Measuring the Yukawa couplings: Towards the 2nd generation fermions</i>
HEP Lunch Seminar, University of Chicago | May 2023 |
| 21. <i>Electroweak Tevatron: High-Energy lepton colliders</i>
Theoretical Physics Seminar, Fermilab | May 2023 |
| 22. <i>Bread and butter physics at future multi-TeV lepton colliders</i>
LEPP Theory Seminar, Cornell University | May 2023 |
| 23. <i>Measuring the Yukawa couplings: Towards the 2nd generation fermions</i>
HEP Theory Seminar, University at Buffalo | May 2023 |
| 24. <i>Determine the Yukawa couplings of the second generation fermions
at high-energy colliders</i>
(Remote) HEP Theory Seminar, Argonne National Laboratory (ANL) | January 2023 |
| 25. <i>Determine the Yukawa couplings of the second generation fermions
at high-energy colliders</i>
(Remote) TDLI/INPAC Joint Theory Seminar, Shanghai Jiao Tong University | December 2022 |
| 26. <i>Determine the Yukawa couplings of the second generation fermions
at high-energy colliders</i>
(Remote) Particle Physics Seminar, Chongqing University | December 2022 |

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

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| 47. <i>How much do we need polarized PDFs?</i>
PITT PACC Group Seminar, University of Pittsburgh | October 2019 |
| 48. <i>Renormalization scheme uncertainties in high order perturbative QCD results</i>
PITT PACC Group Seminar, University of Pittsburgh | March 2019 |

CONFERENCE AND WORKSHOP TALKS

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

18. *Electroweak LHC: High-energy lepton colliders* April 2023
Invited talk at PIKIMO Spring 2023, Ohio State University
19. *EW and QCD physics at the muon collider* December 2022
Parallel talk at Milan Christmas Meeting 2022, Milan, Italy
20. *Higgs decay to charmonia and the charm-quark Yukawa coupling* November 2022
Parallel talk at the Higgs 2022 Conference, Pisa, Italy
21. *EW and QCD physics at the muon collider* October 2022
Parallel talk at Muon Collider Collaboration Meeting 2022, CERN
22. *Higgs decay to charmonia via c-quark fragmentation* September 2022
Invited plenary talk at QWG 2022, GSI Darmstadt, Germany
23. *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
24. *Higgs decay to J/ψ via c-quark fragmentation* July 2022
(Remote) Parallel talk at ICHEP 2022, Bologna, Italy
25. *Higgs decay to J/ψ via c-quark fragmentation* May 2022
Parallel talk at Pheno 2022, University of Pittsburgh
26. *Multi-boson production and the muon Yukawa coupling* April 2022
Contributed talk at APS April Meeting 2022, New York
27. *Multi-boson production and the muon Yukawa coupling* December 2021
PIKIMO 11, University of Pittsburgh
28. *Electroweak parton distributions and fragmentations for high-energy lepton colliders* October 2021
(Remote) Snowmass EF04 Topical Group Community Meeting
29. *Higgs boson decay to J/ψ via c-quark fragmentation* October 2021
(Remote) Parallel talk at Higgs 2021 Conference, Stony Brook University
30. *The partonic picture at high-energy lepton colliders* August 2021
(Remote) Parallel talk at SUSY 2021, Shanghai
31. *QCD jet production at a high energy muon collider* July 2021
(Remote) Parallel talk at EPS-HEP 2021, DESY
32. *Quark and gluon contents of a lepton at high energies* July 2021
(Remote) Parallel talk at the DPF meeting, Florida State University
33. *Quark and gluon contents of a lepton at high energies* May 2021
(Remote) Parallel talk at Pheno 2021, University of Pittsburgh
34. *The partonic picture at high-energy lepton colliders* May 2021
(Remote) Parallel talk at PPC 2021, University of Oklahoma
35. *Electroweak parton distribution functions at a high-energy muon collider* April 2021
(Remote) Contributed talk at APS April Meeting 2021
36. *QCD jet production at a high energy muon collider* March 2021
(Remote) Talk at Muon Collider Physics and Simulation Meeting, CERN
37. *The electroweak parton distribution functions - Necessity and application* June 2020
(Remote) Student talk at Theoretical Advanced Study Institute (TASI 2020)

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| 38. <i>The electroweak parton distribution functions</i>
(Remote) Parallel talk at Pheno 2020, University of Pittsburgh | May 2020 |
| 39. <i>QCD Scale-setting problem in Future Chinese Collider physics</i>
Parallel talk at CEPC-SppC Study Group Meeting, IHEP, Beijing | September 2015 |

CONFERENCES AND WORKSHOPS ATTENDED

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

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| 28. The XXVIII International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2021), Shanghai (remote) | August 2021 |
| 29. European Physical Society Conference on High Energy Physics 2021 (EPS-HEP 2021) DESY (remote) | July 2021 |
| 30. 2021 Meeting of the Division of Particles and Fields of the APS (DPF21) Florida State University (remote) | July 2021 |
| 31. Phenomenology Symposium 2021 (Pheno 2021) University of Pittsburgh (remote) | May 2021 |
| 32. XIV International Workshop on Interconnections between Particle Physics and Cosmology (PPC 2021), University of Oklahoma (remote) | May 2021 |
| 33. APS April Meeting 2021 (remote) | April 2021 |
| 34. Muon Collider Physics and Simulation Meeting (remote) | March 2021 |
| 35. PITT PACC Workshop: Muon collider physics University of Pittsburgh (remote) | November 2020 |
| 36. Phenomenology Symposium 2020 (Pheno 2020) University of Pittsburgh (remote) | May 2020 |
| 37. Phenomenology Symposium 2020 (Pheno 2019), University of Pittsburgh | May 2019 |
| 38. PITT PACC Workshop: BSM circa 2020, University of Pittsburgh | March 2019 |
| 39. Phenomenology Symposium 2020 (Pheno 2018), University of Pittsburgh | May 2018 |
| 40. Phenomenology Symposium 2020 (Pheno 2017), University of Pittsburgh | May 2017 |
| 41. The CEPC-SppC Study Group Meeting
Institute of High Energy Physics (IHEP), Beijing | September 2015 |

SUMMER SCHOOLS ATTENDED

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