

WENZER QIN

CONTACT INFORMATION

email wenzerq@mit.edu
website <https://wenzerq.github.io/>

EDUCATION

2019-present Massachusetts Institute of Technology, Cambridge, MA
 Advisor: Prof. Tracy SLATYER
 Ph.D., Physics; GPA: 5.0/5.0
2015-2019 Johns Hopkins University, Baltimore, MD
 Advisors: Prof. Marc KAMIONKOWSKI, Prof. Nadia ZAKAMSKA, Prof. Andrei GRITSAN
 B.S., Physics; B.A., Mathematics; GPA: 3.99/4.0 (Major GPA: 4.0/4.0)

AWARDS AND HONORS

2021 · MIT Physics Graduate Student Service Award
2019 · NSF Graduate Research Fellowship
 · LeRoy Apker Award Finalist
 · C. M. Clay and Henry W. Kendall Fellowships (MIT First Year Fellowships)
 · Donald E. Kerr Memorial Award for outstanding graduating senior in Physics
 · J.J. Sylvester Award for outstanding graduating senior in Mathematics
2018 · Barry Goldwater Scholarship
 · Caltech's FUTURE of Physics program for outstanding undergraduate women in physics
 · Johns Hopkins STAR Award for summer research
2017 · Inducted into Sigma Pi Sigma ($\Sigma \Pi \Sigma$)
 · Maryland Space Grant recipient for summer research
 · 2nd Place Presentation, Maryland Space Grant Consortium Student Research Symposium

PUBLICATIONS (* INDICATES ALPHABETICAL AUTHORSHIP ORDER)

- [5] * H. Liu, **Qin, W.**, G. W. Ridgway, and T. R. Slatyer. "Lyman- α constraints on cosmic heating from dark matter annihilation and decay". *Phys. Rev. D*, 104(4):043514, 2021. [arXiv:2008.01084](#) [[astro-ph.CO](#)]
- [4] **W. Qin**, K. K. Boddy, and M. Kamionkowski. "Subluminal stochastic gravitational waves in pulsar-timing arrays and astrometry". *Phys. Rev. D*, 103(2):024045, 2021. [arXiv:2007.11009](#) [[gr-qc](#)]
- [3] **W. Qin**, K. K. Boddy, M. Kamionkowski, and L. Dai. "Pulsar-timing arrays, astrometry, and gravitational waves". *Phys. Rev. D*, D99(6):063002, March 2019. [arXiv:1810.02369](#) [[astro-ph.CO](#)]
- [2] **W. Qin**, D. M. Nataf, N. Zakamska, P. R. Wood, and L. Casagrande. "The Mira-based distance to the Galactic centre". *The Astrophysical Journal*, 865(1):47, August 2018. [arXiv:1808.01294](#) [[astro-ph.SR](#)]
- [1] CMS Collaboration (including **W. Qin**). "Search for a new scalar resonance decaying to a pair of Z bosons in proton-proton collisions at $\sqrt{s}=13$ TeV". *Journal of High Energy Physics*, 6:127, June 2018. [arXiv:1804.01939](#) [[hep-ex](#)]

CONFERENCE PRESENTATIONS

2020, Aug 25 · Cosmology From Home, virtual parallel talk, *“Lyman-alpha constraints on Cosmic Heating from Dark Matter Annihilation and Decay”*

WORKSHOPS AND SCHOOLS

2021, Jul 25 - Aug 20 · Les Houches Summer School: Dark Matter

SEMINARS

2022, Feb 8 · HERA Theory Group Telecon, *“Extending the Effective Field Theory of 21cm radiation”*

2021, Sep 28 · Harvard University, Particle Theory Journal Club, *“Introduction to 21cm Cosmology”*

2021, May 14 · MIT Center for Theoretical Physics, BSM Journal Club, *“Redshift space distortions in an effective field theory of 21cm radiation”*

2021, May 05 · MIT Kavli Institute, Graduate Lunch Seminar, *“Redshift space distortions in an effective field theory of 21cm radiation”*

2020, Aug 14 · MIT Center for Theoretical Physics, BSM Journal Club, *“Lyman-alpha constraints on Cosmic Heating from Dark Matter Annihilation and Decay”*

2019, Dec 04 · MIT Kavli Institute, Graduate Lunch Seminar, *“Pulsar timing arrays, astrometry, and gravitational waves”*

COMMUNITY

2022 · Graduate Student Representative to MIT Graduate Admissions Committee (since 2020)

· Mentor for MIT UWIP-GWIP mentorship program (since 2019)

2021 · Mentor for MIT Physics Directed Reading Program

· Vice President of advocacy for the MIT Physics Graduate Student Council

2020 · Treasurer of the MIT Physics Graduate Student Council

· Graduate Women in Physics Representative to MIT Department Colloquium Committee

· Member of MIT Graduates Advising Graduate Admissions

2019 · Organizer for the MIT Center for Theoretical Physics Friday Lunch Seminar

· Member of the Johns Hopkins team for the 2019 International Olympiad in Theoretical Physics; placed 1st overall

2018 · Founder of the Johns Hopkins Physics Undergraduate Journal Club

· Member of the Johns Hopkins team for the 2018 International Olympiad in Theoretical Physics; placed 9th overall

TEACHING

2022 · Teaching Assistant at MIT (Modern Astrophysics 8.284)

2016-2018 · Teaching Assistant at Johns Hopkins University (General Physics 171.102 and 171.108)

April 1, 2022