

# MATHEUS HOSTERT

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## ACADEMIC POSITIONS

- University of Iowa** Aug. 2025 - present  
Assistant Professor.
- Harvard University** Sept. 2023 - Aug. 2025  
Neutrino Theory Network Fellow. Department of Energy fellowship on theoretical particle physics.
- University of Minnesota & Perimeter Institute** Sept. 2019 - Sept. 2023  
Joint four-year postdoctoral researcher appointment, based at each location for two years.

## EDUCATION

- Ph.D.** in Theoretical Physics – Durham University, United Kingdom Oct. 2015 - Sep. 2019  
Dissertation: Hidden Physics at the Neutrino Frontier: Tridents, Dark Forces, and Hidden Particles.  
Supervisor: Prof. Silvia Pascoli.  
Dissertation Committee: Profs. Joachim Kopp and David Cerdeño.
- Bachelor's degree** in Physics – Federal University of Santa Catarina, Brazil Mar. 2011 - Jun. 2015  
With a year abroad at Durham University (Sept. 2013 - Sept. 2014) and honors in advanced mathematics.

## FELLOWSHIPS AND AWARDS

- Neutrino Theory Network fellowship** (Jan. 2023): fully funded postdoctoral position at Harvard University.
- Science without Borders Ph.D. scholarship** (Sept. 2015): excellence-based Brazilian scholarship for a full Ph.D. abroad.
- Science without Borders Undergraduate scholarship** (Sept. 2013): excellence-based Brazilian scholarship for one year of undergraduate studies abroad.

## COURSES TAUGHT

- Graduate-level special topics course on Particle Physics Beyond-the-Standard Model, Fall 2025.
- Graduate-level Quantum Mechanics-II, *in progress*.

## SPECIAL LECTURES

- **Fermilab Neutrino University**: one lecture on “New Physics with Neutrinos” as part of the Fermilab lecture series for summer interns.
- **ICTP-SAIFR School on Dark Matter and Neutrino Detection, 2024**: three lectures on neutrinos beyond the Standard Model at ICTP-SAIFR in São Paulo.
- **Perimeter ISSYP 2022 and 2023**: led high-school students in a one-week project about neutrinos.
- **Graduate tutor**, 2016 to 2018: led 2nd-year physics students in problem classes on advanced classical mechanics and quantum theory.
- **Undergraduate tutor**, 2012 to 2013: invited tutor for university-wide program mentoring first-year students at Federal University of Santa Catarina (UFSC).

## SUPERVISION

- **Ph.D. students:**
  - Joel Choi, working on neutrino fluxes at the muon collider accelerator complex.
- **Post-doctoral scholars:**
  - Dr. Stephan Meighen-Berger, working on neutrino and astroparticle physics.

## MENTORSHIP

- Mentoring in Ph.D. research projects:
  - Jaime Hoefken (University of Bologna, 2022 to 2023): mentoring in two publications.
  - Daniele Massaro (University of Bologna, 2021 to 2023): mentoring in four publications.
  - Asli Abdullahi (Durham University, 2020 to 2021): mentoring in two publications.
  - Nicholas Kamp (MIT, 2021 to 2022): mentoring in two publications,
  - Nicolò Foppiani (Harvard University, 2020 to 2022): mentoring in two publications.
- Mentoring in undergraduate research projects:
  - Isaac Cheng (University of Waterloo, 2023): primary advisor in PSI Start Summer project at the Perimeter Institute working on the cosmic neutrino background asymmetry.
  - Nathan Gershengorn (Harvard University, current): research on the effect of matter potentials on the cosmic neutrino background asymmetry,
  - Luc Bojorquez-Lopez (Harvard University, current): researching the beam-induced neutrino rate at muon collider detectors, resulting in a publication.
  - Connor Sponsler (Harvard University, current): researching new matter resonances in neutrino propagation through the atmosphere, resulting in a publication.

## SCIENCE OUTREACH

- **IceCube Masterclass 2024:** main local organizer at Harvard for the IceCube Masterclass 2024.
- **Perimeter ISSYP 2022 and 2023:** tutor at two editions of the International Summer School for Young Physicists at Perimeter.
- **KITP Teacher's Conference 2022:** speaker at the KITP teacher's conference.
- **IceCube comics:** translated all the Rosie & Gibbs comics about IceCube into Brazilian Portuguese.
- **Royal Society Summer Exhibition 2017 and 2018:** event organizer for the "Modeling the Invisible" exhibition and the "Ghosts in the Universe" exhibition.
- **Celebrate Science 2018:** volunteer in regional outreach event for schools in County Durham.
- **Orkney Science Festival 2018:** volunteer in the International Orkney Science Festival, visiting schools in remote islands of the Orkney archipelago in the north of Scotland.
- **Pint of Science 2017:** event manager for a local outreach event in County Durham.

## COMMUNITY ENGAGEMENT

- **INSS 2025**: member of the local organizing committee for International Neutrino Summer School (INSS) 2025.
- **NuFact Workshop**: convener for “Neutrinos Beyond PMNS” working group under a three-year term (2024 - 2026).
- **Snowmass 2021**: Editor for the “Neutrino Frontier” white paper on sterile neutrinos and the “Rare Processes and Precision Measurements” white paper on new physics in kaon and hyperon factories. Made substantial contributions to over seven white papers and led a letter of intent on non-minimal neutrino mass models.
- **CERN FPC PBC**: member of the Feebly Interacting Particle (FPC) working group, part of the Physics Beyond Colliders (PBC) effort at CERN.
- **Weak Interactions and Neutrinos 2021**: one of primary event organizers for the 2021 edition in Minnesota, US.
- **IceDUNE workshop 2021**: convener of the Beyond the Standard Model physics session aimed at increasing the cross-talk between IceCube and DUNE collaborators.
- **Young Theorists Forums 9, 10, and 11**: event organizer for the annual one-day conference for graduate students in the UK.
- **Journal refereeing**: refereed for Physical Review Letters, Physical Review D, Journal of High Energy Physics, European Physics Journal C, and the Astrophysical Journal.

## EXPERIMENTAL COLLABORATIONS

- Participated in a Memorandum of Understanding to collaborate with **MicroBooNE** on a search for dark sectors.
- Member of the **Deep Underground Neutrino Experiment (DUNE)** from 2015 to 2023 and of **IceCube** as of 2023.

## PUBLICATIONS

The following is a selected list of publications for which I was one of the primary contributors. Author lists are displayed alphabetically, as is the standard in particle physics. A complete list can be found at [inspirehep.net/authors/1621061](https://inspirehep.net/authors/1621061).

### Citation metrics:

- **h-index** of 43 (all publications) / 17 (publications with 10 authors or less)
- **Total citations** 7,806 (all publications) / 1,040 (publications with 10 authors or less)

### Top publications (with 10 authors or less):

1. Dark Neutrinos and a Three Portal Connection to the Standard Model, Peter Ballett, Matheus Hostert, Silvia Pascoli, Phys.Rev.D 101 (2020) 11 115025, arXiv:1903.07589 [hep-ph], citations: **105**.
2. MicroBooNE and the  $\nu_e$  Interpretation of the MiniBooNE Low-Energy Excess, Carlos A. Argüelles, Ivan Esteban, Matheus Hostert, Kevin J. Kelly, Joachim Kopp, Pedro Machado, Ivan Martinez-Soler, Yuber F. Perez-Gonzalez, Phys.Rev.Lett. 128 (2022) 24 241802, arXiv:2111.10359 [hep-ph], citations: **96**.
3. Testing New Physics Explanations of the MiniBooNE Anomaly at Neutrino Scattering Experiments, Carlos A. Argüelles, Matheus Hostert, Yu-Dai Tsai, Phys.Rev.Lett. 123 (2019) 26 261801, arXiv:1812.08768 [hep-ph], citations: **87**.
4.  $Z$ 's in neutrino scattering at DUNE, Peter Ballett, Matheus Hostert, Silvia Pascoli, Yuber F. Perez-Gonzalez, Zahra Tabrizi, Renata Zukanovich Funchal, Phys.Rev.D 100 (2019) 5 055012, arXiv:1902.08579 [hep-ph], citations: **79**.
5. Effective portals to heavy neutral leptons, Enrique Fernández-Martínez, Manuel González-López, Josu Hernández-García, Matheus Hostert, Jacobo López-Pavón, JHEP 09 (2023) 001, arXiv:2304.06772 [hep-ph], citations: **74**.

## Other peer-reviewed publications

6. Long-lived Axion-Like Particles from Tau Decays, Yohei Ema, Patrick J. Fox, Matheus Hostert, Tony Menzo, Jure Zupan, *Phys.Rev.D* 112 (2025) 11, 115028, arXiv:2507.15271 [hep-ph], citations: 4.
7. Astrophysical flux of dark particles as a solution to the KM3NeT and IceCube tension over KM3-230213A, Yasaman Farzan, Matheus Hostert, *JHEP* 10 (2025) 208, arXiv:2505.22711 [hep-ph], citations: **11**.
8. Towards a Robust Exclusion of the Sterile-Neutrino Explanation of Short-Baseline Anomalies, Ohana Benevides Rodrigues, Matheus Hostert, Kevin J. Kelly, Bryce Littlejohn, Pedro A. N. Machado, Ibrahim Safa, Tao Zhou, *Phys.Rev.Lett.* 135 (2025) 8, 081801, arXiv:2503.13594 [hep-ph], citations: 1.
9. The Neutrino Slice at Muon Colliders, Luc Bojorquez-Lopez, Matheus Hostert, Carlos A. Argüelles, Zhen Liu, *Phys.Rev.Lett.* 135 (2025) 9, 091803, arXiv:2412.14115 [hep-ph], citations: 8.
10. Muon-induced baryon number violation, Patrick J. Fox, Matheus Hostert, Tony Menzo, Maxim Pospelov, Jure Zupan, *Phys.Rev.D* 110 (2024) 7 075015, arXiv:2407.03450 [hep-ph], citations: 6.
11. Decaying sterile neutrinos at short baselines, Matheus Hostert, Kevin J. Kelly, Tao Zhou, *Phys.Rev.D* 110 (2024) 7 075002, arXiv:2406.04401 [hep-ph], citations: 3.
12. Panorama of new-physics explanations to the MiniBooNE excess, Asli M. Abdullahi, Jaime Hoefken Zink, Matheus Hostert, Daniele Massaro, Silvia Pascoli, *Phys.Rev.D* 111 (2025) 3 035028, arXiv:2308.02543 [hep-ph], citations: **19**.
13. New physics in multi-electron muon decays, Matheus Hostert, Tony Menzo, Maxim Pospelov, Jure Zupan, *JHEP* 10 (2023) 006, arXiv:2306.15631 [hep-ph], citations: 8.
14. Pion decay constraints on exotic 17 MeV vector bosons, Matheus Hostert, Maxim Pospelov, *Phys.Rev.D* 108 (2023) 5 055011, arXiv:2306.15077 [hep-ph], citations: **16**.
15. Constraining light thermal inelastic dark matter with NA64, Martina Mongillo, Asli Abdullahi, Benjamin Banto Oberhauser, Paolo Crivelli, Silvia Pascoli, *Eur.Phys.J.C* 83 (2023) 5 391, arXiv:2302.05414 [hep-ph], citations: **24**.
16. Semi-Visible Dark Photon Phenomenology at the GeV Scale, Asli M. Abdullahi, Matheus Hostert, Daniele Massaro, Silvia Pascoli, *Phys.Rev.D* 108 (2023) 1 015032, arXiv:2302.05410 [hep-ph], citations: **35**.
17. Implications of MicroBooNE's low sensitivity to electron antineutrino interactions in the search for the Mini-BooNE excess, Nicholas W. Kamp, Matheus Hostert, Carlos A. Argüelles, Janet M. Conrad, Michael H. Shaevitz, *Phys.Rev.D* 107 (2023) 9 092002, arXiv:2301.12573 [hep-ph], citations: 5.
18. DarkNews: A Python-based event generator for heavy neutral lepton production in neutrino-nucleus scattering, Asli M. Abdullahi, Jaime Hoefken Zink, Matheus Hostert, Daniele Massaro, Silvia Pascoli, *Comput.Phys.Commun.* 297 (2024) 109075, arXiv:2207.04137 [hep-ph], citations: **11**.
19. Dipole-coupled heavy-neutral-lepton explanations of the MiniBooNE excess including constraints from MINERvA data, Nicholas W. Kamp, Matheus Hostert, Austin Schneider, Stefano Vergani, Melissa A. Uchida, *Phys.Rev.D* 107 (2023) 5 055009, arXiv:2206.07100 [hep-ph], citations: **29**.
20. Efficiently exploring multidimensional parameter spaces beyond the Standard Model, Carlos A. Argüelles, Nicolò Foppiani, Matheus Hostert, *Phys.Rev.D* 107 (2023) 3 035027, arXiv:2205.12273 [hep-ph], citations: 11.
21. Dark sectors in neutron-shining-through-a-wall and nuclear-absorption signals, Matheus Hostert, David McKeen, Maxim Pospelov, Nirmal Raj, *Phys.Rev.D* 107 (2023) 7 075034, arXiv:2201.02603 [hep-ph], citations: **19**.
22. Heavy neutral leptons below the kaon mass at hodoscopic neutrino detectors, Carlos A. Argüelles, Nicolò Foppiani, Matheus Hostert, *Phys.Rev.D* 105 (2022) 9 095006, arXiv:2109.03831 [hep-ph], citations: **60**.

23. Novel multilepton signatures of dark sectors in light meson decays, Matheus Hostert, Maxim Pospelov, Phys.Rev.D 105 (2022) 1 015017, arXiv:2012.02142 [hep-ph], citations: **44**.
24. Constraints on decaying sterile neutrinos from solar antineutrinos, Matheus Hostert, Maxim Pospelov, Phys.Rev.D 104 (2021) 5 055031, arXiv:2008.11851 [hep-ph], citations: **26**.
25. A dark seesaw solution to low energy anomalies: MiniBooNE, the muon ( $g - 2$ ), and BaBar, Asli Abdullahi, Matheus Hostert, Silvia Pascoli, Phys.Lett.B 820 (2021) 136531, arXiv:2007.11813 [hep-ph], citations: **76**.
26. Pair production of dark particles in meson decays, Matheus Hostert, Kunio Kaneta, Maxim Pospelov, Phys.Rev.D 102 (2020) 5 055016, arXiv:2005.07102 [hep-ph], citations: **34**.
27. Neutrino Masses from a Dark Neutrino Sector below the Electroweak Scale, Peter Ballett, Matheus Hostert, Silvia Pascoli, Phys.Rev.D 99 (2019) 9 091701, arXiv:1903.07590 [hep-ph], citations: **59**.
28. Neutrino trident production at near detectors, Matheus Hostert, PoS NOW2018 (2019) 037, citations: **1**.
29. Neutrino Trident Scattering at Near Detectors, Peter Ballett, Matheus Hostert, Silvia Pascoli, Yuber F. Perez-Gonzalez, Renata Zukanovich Funchal, JHEP 01 (2019) 119, arXiv:1807.10973 [hep-ph], citations: **72**.

#### Under review or non-peer reviewed publications

1. New Multi-messenger Probe of Dark Matter-Nucleon Interactions from Ultra-high Energy Cosmic Ray Acceleration, Stephan A. Meighen-Berger, P.S. Bhupal Dev, Matheus Hostert, arXiv:2512.18093 [hep-ph].
2. Neutron portal to ultra-high-energy neutrinos, Gustavo F. S. Alves, Matheus Hostert, Maxim Pospelov, preprint, 2025, arXiv:2503.14419 [hep-ph], citations: **14**, under review by PRD.
3. Resonant Neutrino Flavor Conversion in the Atmosphere, Connor Sponsler, Matheus Hostert, Ivan Martinez-Soler, Carlos A. Argüelles, preprint, 2024, arXiv:2405.12140 [hep-ph], citations: **2**, under review by PRD.
4. Hidden Physics at the Neutrino Frontier: Tridents, Dark Forces, and Hidden Particles, Matheus Hostert, thesis, 2019.
5. Light Sterile Neutrinos at  $\nu$ STORM: Decoherence and CP violation, Peter Ballett, Matheus Hostert, Silvia Pascoli, proceedings, 2017, arXiv:1705.09214 [hep-ph], citations: **1**.

#### Community white papers and large collaborations

A list of community papers to which I contributed significantly, highlighting my participation below each entry.

1. First Search for Dark Sector  $e^+e^-$  Explanations of the MiniBooNE Anomaly at MicroBooNE, MicroBooNE collaboration, citations: **6**.  
— Responsible for developing the signal simulation and helped devise the analysis strategy and scope.
2. From oversimplified to overlooked: the case for exploring Rich Dark Sectors, Invited contribution to the Nuclear Physics B Special Issue on “Clarifying common misconceptions in high energy physics and cosmology”, 2025, arXiv:2505.05663 [hep-ph], citations: **2**.  
— Main contributor to sections on models and phenomenology of non-minimal dark sectors.
3. Feebly Interacting Particles: FIPs 2022 workshop report, C. Antel et al, proceedings, 2023, arXiv:2305.01715 [hep-ph], citations: **222**.  
— Contributor to the “New Ideas” section.
4. The present and future status of heavy neutral leptons, Asli M. Abdullahi et al, J.Phys.G 50 (2023) 2 020501, arXiv:2203.08039 [hep-ph], citations: **273**.  
— Contributor to the “Theory of Heavy Neutral Leptons: Dark Sectors” section.

5. Feebly-interacting particles: FIPs 2020 workshop report, Prateek Agrawal et al, Eur.Phys.J.C 81 (2021) 11 1015, 2021, arXiv:2102.12143, citations: **335**.  
— Contributor to the "Heavy Neutral Leptons" section.
6. New opportunities at the next-generation neutrino experiments I: BSM neutrino physics and dark matter, C. A. Argüelles et al, Rept.Prog.Phys. 83 (2020) 12 124201, 2019, arXiv:1907.08311, citations: **119**.  
— One of the main contributors to the sections on heavy neutral leptons.
7. Neutrino Non-Standard Interactions: A Status Report, P. S. Bhupal Dev et al, SciPost Phys.Proc. 2 (2019) 001, 2019, arXiv:1907.00991, citations: **225**.  
— Writing of the sections on neutrino trident production and neutrino-electron scattering.
8. Dark Sector Studies with Neutrino Beams, Brian Batell et al, proceedings, 2022, arXiv:2207.06898, citations: **36**.  
— Led the contributions on non-minimal heavy neutral lepton models.
9. The Physics Case for a Neutrino Factory, Alex Bogacz et al, proceedings, 2022, arXiv:2203.08094, citations: **15**.  
— One of the main contributors to the beyond-the-Standard-Model motivations for a neutrino factory.
10. White Paper on Light Sterile Neutrino Searches and Related Phenomenology, M. A. Acero et al, preprint, 2022, arXiv:2203.07323, citations: **115**.  
— Co-editor in charge of requesting contributions on beyond-the-Standard-Model explanations of the short-baseline anomalies. Also contributed to a substantial portion of the final text.
11. Neutrino Self-Interactions: A White Paper, Jeffrey M. Berryman et al, proceedings, 2022, arXiv:2203.01955, citations: **111**.  
— Contributor to the section on neutrino-self-interactions via the neutrino mixing portal.
12. New physics searches at kaon and hyperon factories, Evgueni Goudzovski, et al, Rept.Prog.Phys. 86 (2023) 1 016201, arXiv:2201.07805 [hep-ph], citations: **146**.  
— Co-editor on sections about effective isospin violation in kaon decays and on the production of multiple light particles in kaon decays.
13. A Snowmass Whitepaper: Dark Matter Production at Intensity-Frontier Experiments, G. Krnjaic et al, preprint, 2022, arXiv:2207.00597, citations: **47**.  
— Contributor to sections on dark matter detection using neutrinos and on neutrophilic dark matter models.

## TALKS AND SEMINARS

### Colloquia

- December 2025 — Columbia University, USA
- October 2025 — Idaho State University, USA
- January 2024 — University of Iowa, USA

### Plenary Talks

- August 2025 — 2nd US Muon Collider Meeting, USA
- June 2025 — Interconnection between Particle Physics and Cosmology (PPC2025), USA

### Invited talks

- January 2026 — Neutrino Physics Center Mini-Workshop on Short-Baseline Neutrino Anomalies
- January 2026 — Neutrino Physics Center Seminar Series, Fermilab, USA
- December 2025 — Violation of Fundamental Symmetries with B mesons, Fermilab, USA

- December 2025 — Research Day at the Center for Neutrino Physics at Virginia Tech, USA
- June 2025 — NPN Cincinnati 2025, USA
- June 2025 — CIPANP 2025, USA
- June 2025 — Magnificent CEvNS 2025, Brazil (virtual)
- May 2025 — Mitchell Conference at Texas A&M, USA
- March 2025 — Aspen Winter Conference, USA
- September 2024 — Muon Collider Meeting by the Lake, USA
- June 2024 — Magnificent CEvNS 2024, Spain
- May 2024 — Mitchell Conference at Texas A&M, USA
- April 2024 — 2nd Short-Baseline Experiment-Theory Workshop, USA
- December 2023 — Muons in Minneapolis workshop, USA
- June 2023 — PhenoBR 2023, Brazilian virtual conference
- April 2023 — American Physics Society April meeting, Minneapolis, USA
- December 2022 — NuTools workshop, Pittsburgh, USA
- September 2022 — ICTP Program on New Directions in Particle Physics, São Paulo, Brazil
- June 2022 — Neutrino Theory Workshop, NuTs, Madrid, Spain
- March 2022 — KITP, Interdisciplinary Developments in Neutrino Physics, Santa Barbara, USA
- October 2021 — Virginia Tech, neutrino seminar, Blacksburg, USA
- September 2021 — UK Muon Collider and NuSTORM meeting, UK
- August 2021 — vSTORM collaboration meeting, CERN
- December 2020 — Snowmass Dark Sector Studies at High Intensities Frontier, USA
- November 2020 — Central American meeting of High Energy Physics, Cosmology and High Energy Astrophysics, Cidade da Guatemala, Central America
- October 2020 — 3rd South American Dark Matter Workshop, ICTP, São Paulo, Brazil
- October 2020 — PIKIMO 9, Kentucky, Kentucky, USA
- October 2020 — Snowmass Baryon and Lepton Number Violating Processes workshop, USA
- September 2020 — Snowmass Theory of neutrino physics mini-workshop, USA
- September 2020 — Snowmass Neutrino Frontier 03 kick-off meeting, USA
- December 2019 — NuPhys 2019, London, UK
- October 2019 — CERN Neutrino Platform Week 2019, CERN, Switzerland
- May 2019 — Neutrino Theory Network Workshop, Washington U., St Louis, St Louis, USA
- April 2019 — Prospects of Neutrino Physics, IPMU, Kashiwa, Japan
- December 2018 — Physics Opportunities at the Near Detector of DUNE (PONDD), Fermilab, Fermilab, USA
- June 2018 — Near detector workshop 2018, CERN, CERN, Switzerland

#### **Invited parallel talks**

- November 2021 — Brookhaven Forum 2021, Brookhaven National Laboratory, USA
- September 2018 — Neutrino Oscillation Workshop 2018, Ostuni, Italy
- August 2018 — NuFact 2018, Virginia, Blacksburg, USA
- May 2018 — Phenomenology Symposium 2018, Pittsburgh, USA

#### **Parallel and contributed talks**

- February 2025 — CERN Neutrino Platform Pheno Week, CERN, Switzerland
- August 2024 — Inaugural US Muon Collider Community Meeting, Fermilab, USA
- June 2024 — Magnificent CEvNS
- October 2022 — Feebly Interacting Particles Workshop 2022, CERN, Switzerland
- September 2022 — CIPANP 2022, Orlando, USA
- August 2022 — TeVPA 2022, Kingston, Canada
- July 2022 — Snowmass 2022, Seattle, USA
- July 2021 — American Physics Society Division of Particles and Fields meeting, USA

- April 2021 — American Physics Society April Meeting, USA
- February 2021 — XIX International Workshop on Neutrino Telescopes, Italy
- July 2020 — ICHEP 2020, Prague, Czech Republic
- June 2020 — Neutrino 2020, University of Chicago, Chicago, USA
- May 2020 — Phenomenology Symposium 2020, Pittsburgh, USA
- June 2019 — Invisibles Workshop 2019, Valencia, Spain

**Invited seminars**

- December 2025 — University of Wisconsin, USA
- November 2025 — Grinnell College, USA
- October 2025 — Sydney Consortium for Particle Physics and Cosmology, Australia
- October 2025 — Brookhaven National Lab, USA
- March 2025 — Argonne National Laboratory, USA
- October 2024 — University of Iowa, USA
- September 2024 — Northwestern University, USA
- September 2024 — Fermilab Theory Division, USA
- October 2023 — University of Massachusetts, Amherst, USA
- April 2023 — Columbia University, New York, USA
- April 2023 — California Institute of Technology, Pasadena, USA
- December 2022 — Northwestern University, Evanston, USA
- December 2022 — Los Alamos National Laboratory, Los Alamos, USA
- November 2022 — Queen's University, Kingston, Canada
- November 2022 — King's College London, London, UK
- November 2022 — Carleton University, Carleton, Canada
- March 2022 — University of Texas A&M, College Station, USA
- March 2022 — University of Toronto, Toronto, Canada
- February 2022 — TRIUMF/University of Victoria, Victoria, Canada
- January 2022 — University of Kentucky, Kentucky, USA
- December 2021 — SLAC, Stanford National Laboratory, USA
- November 2021 — Harvard University, family meeting, Boston, USA
- September 2021 — Perimeter Institute, particle physics seminar, Waterloo, Canada
- May 2021 — McGill University, Montreal, Canada
- April 2021 — ETH, Zürich, Switzerland
- April 2021 — C3P, UCLouvain, Louvain, Belgium
- April 2021 — Carleton University, Carleton, Canada
- March 2021 — University of California Santa Cruz, Santa Cruz, USA
- March 2021 — Neutrino Seminar, Fermilab, Fermilab, USA
- June 2020 — JGU Theorie Palaver, Mainz, Germany
- May 2020 — Brookhaven Neutrino Theory Virtual Seminars, Brookhaven National Laboratory, USA
- February 2020 — Fermilab Theory Seminar, Fermilab, USA
- August 2019 — Columbia University, New York, USA
- August 2019 — MicroBooNE collaboration call, USA
- May 2019 — IFIC, Valencia, Spain
- March 2019 — Queen Mary University of London, London, UK
- November 2018 — Max-Planck-Institut für Kernphysik, Heidelberg, Heidelberg, Germany
- June 2018 — Perimeter Institute, Waterloo, Canada
- May 2018 — Fermilab Theory Seminar, Fermilab, USA