

Kevin J. Kelly

Curriculum Vitae

PERSONAL DETAILS

Location Texas A&M University, Mitchell Institute for Fundamental Physics and Astronomy
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EMPLOYMENT

Assistant Professor 2022-Present
Texas A&M University (Department of Physics and Astronomy)
Senior Research Fellow 2021-2022
CERN (Department of Theoretical Physics)
Postdoctoral Research Associate 2018-2021
Fermi National Accelerator Laboratory (Theory Group)

EDUCATION

PhD Physics 2013-2018
Northwestern University, Advisor: Prof. André de Gouvêa
BSc. Physics, Mathematics 2009-2013
University of Notre Dame, Summa Cum Laude. Advisor: Prof. Michael Hildreth

COMMUNITY SERVICE

Journal Referee
Physical Review Letters, Physical Review D, Journal of High Energy Physics, Physics Letters B, European Journal of Physics C
Texas A&M University Physics & Astronomy Festival
2023 volunteer: outreach & demos attended by over 5,500 people in the community.
Departmental Committees (TAMU Physics & Astronomy)
2022-present: Marketing
2022-present: Diversity and Climate
Davidson Young Scholars Symposium
Lecturer, 2023
TAMU Saturday Morning Physics Lecturer
2022: "A Deep Dive into Particle Physics"
Snowmass 2021
Snowmass Early Career Convener: BSM with Neutrinos (NF03) & Neutrino Theory (TF11).
White-paper contribution on self-interacting neutrinos: Co-Led.
Mini-Workshop on Neutrino Theory: Co-Organized.
EuCAPT Symposium 2022
May 2022. Organizer, particle astrophysics
Neutrino University
2019 – Lecture series organizer, Fermilab, June-August 2019
2021 – Speaker: "Beyond the Standard Model Physics with Neutrinos," Virtual, July 2021

Fermilab Undergraduate Lecture Series

Summer 2020, speaker: "Introduction to Particle Physics"

Fermilab Saturday Morning Physics

2019-2020 sessions: lectures on special relativity

Fermilab Office of Education and Public Engagement

Various outreach events: Superheroes in STEM, Ask-A-Scientist, etc.

KICP Lifelong Learning Institute

Outreach talks, October 2019

Hidden Sector Fixed Target Experiments at Fermilab Symposium

Organizer, Fermilab, September 2019

Physics Opportunities at the Near DUNE Detector Hall (PONDD) 2018

Organizer, Fermilab, December 2018

Physics & Astronomy Graduate Student Council

Northwestern University – Secretary (2016), Teaching Assistant Committee Head (2016-2017)

Society of Physics Students

University of Notre Dame - Vice President (2012-2013)

TEACHING EXPERIENCE

PHYS 202 Lecturer

College Physics (Electricity & Magnetism, Modern Physics), Texas A&M University

Spring 2023

PHYS 201 Lecturer

College Physics (Classical Mechanics), Texas A&M University

Fall '22, '23

PHYS 135-1 Substitute Lecturer

Classical Mechanics, Northwestern University

Oct.-Dec. '17

PHYS 412-2 Guest Lecturer

Graduate Quantum Mechanics, Northwestern University

Mar. 2016

PHYS 135-3 Teaching Assistant

Modern Physics, Prof. Zosia Krusberg

Spring 2018

PHYS 135-1 Teaching Assistant

Classical Mechanics, Prof. Zosia Krusberg

Fall 2017

PHYS 135-3 Teaching Assistant

Modern Physics, Prof. Deborah Brown

Spring 2017

PHYS 135-2 Teaching Assistant

Electricity & Magnetism, Prof. Deborah Brown

Winter 2017

ASTRON 120 Teaching Assistant

Highlights of Astronomy, Prof. David Meyer

Fall 2016

ASTRON 220 Teaching Assistant

Introduction to Astrophysics, Prof. David Meyer

Spring 2016

PHYS 135-2 Teaching Assistant

Electricity & Magnetism, Prof. Deborah Brown

Winter 2016

PHYS 135-1 Teaching Assistant

Classical Mechanics, Prof. Deborah Brown

Fall 2015

PHYS 136-1,2,3 Laboratory Assistant

General Physics Laboratories, Prof. Arthur Schmidt

Summer 2015

ASTRON 111 Teaching Assistant

Introduction to Astrobiology, Prof. David Meyer

Spring 2015

ASTRON 101 Teaching Assistant

Modern Cosmology, Prof. Michael Smutko

Winter 2015

ASTRON 120 Teaching Assistant

Highlights of Astronomy, Prof. David Meyer

Fall 2014

HONORS AND AWARDS

Fermilab

Lab Directed R&D (LDRD) Award Co-Investigator: “Accelerator-based Dark Matter Initiatives at Fermilab”

Northwestern University

Weinberg College Outstanding Graduate Student Teacher Award (2015-2016), Physical Sciences

Fermilab Neutrino Physics Center (NPC) Scholar, Fall 2017

University of Notre Dame

Outstanding Physics Major Award, Notre Dame Department of Physics (Spring 2013)

George Kolettis Award in Mathematics (Spring 2013)

1 Publication List

For a complete and up-to-date listing of publications, see my [InspireHEP profile \(link\)](#).

Note that publications as a member of the SBND and DUNE collaborations, as well as contributions to the 2022 Snowmass process, have been omitted from this list, but are available on my InspireHEP profile.

47. **Keeping it Simple: Simplified Frameworks for Long-Lived Particles at Neutrino Facilities**
Brian Batell, Wenjie Huang, **KJK**.
JHEP 08 (2023) 092. [arXiv:2304.11189](#)
46. **There and back again: Solar cycle effects in future measurements of low-energy atmospheric neutrinos**
KJK, Pedro A.N. Machado, Nityasa Mishra, Louis E. Strigari, Yi Zhuang.
Submitted for publication. [arXiv:2304.04689](#)
45. **More Ingredients for an Altarelli Cocktail at MiniBooNE**
KJK, Joachim Kopp.
JHEP 05 (2023) 113. [arXiv:2210.08021](#)
44. **How Broad is a Neutrino?**
Hannah Banks, **KJK**, Matthew McCullough.
JHEP 02 (2023) 136. [arXiv:2209.11270](#)
43. **First Constraints on Heavy QCD Axions with a Liquid Argon Time Projection Chamber using the ArgoNeuT Experiment**
The ArgoNeuT Collaboration, including **KJK**
Phys. Rev. Lett. **130** (2023) no. 22, 221802. [arXiv:2207.08448](#)
42. **Very Light Sterile Neutrinos at NOvA and T2K**
André de Gouvêa, Giancarlo Jusino Sánchez, **KJK**.
Phys. Rev. **D106** (2022) no. 5, 055025. [arXiv:2204.09130](#)
41. **MicroBooNE and the ν_e Interpretation of the MiniBooNE Low-Energy Excess**
C.A. Argüelles, I. Esteban, M. Hostert, **KJK**, J. Kopp, P.A.N. Machado, I. Martinez-Soler, Y.F. Perez-Gonzalez.
Phys. Rev. Lett. **128** (2022) no. 24, 241802. [arXiv:2111.10359](#)
40. **Probing Neutrino-Portal Dark Matter at the Forward Physics Facility**
KJK, Felix Kling, Douglas Tuckler, Yue Zhang.
Phys. Rev. **D105** (2022) no. 7, 075026. [arXiv:2111.05868](#)
39. **DUNE atmospheric neutrinos: Earth Tomography**
KJK, Pedro A.N. Machado, Iván Martinez-Soler, Yuber F Perez-Gonzalez.
JHEP 05 (2022) 187. [arXiv:2110.00003](#)

38. **Characterizing Heavy Neutral Fermions via their Decays**
André de Gouvêa, Patrick J. Fox, Boris Kayser, **KJK**.
Phys. Rev. **D105** (2022) no. 1, 015019. [arXiv:2109.10358](#)
37. **New constraints on tau-coupled Heavy Neutral Leptons with masses $m_N = 280 - 970$ MeV**
The ArgoNeuT Collaboration, including **KJK**.
Phys. Rev. **Lett.** **127** (2021) no. 12, 121801. [arXiv:2106.13684](#)
36. **The MicroBooNE Experiment, the NuMI Absorber, and Heavy Neutral Leptons**
KJK, Pedro A.N. Machado.
Phys. Rev. **D104** (2021) no. 5, 055015. [arXiv:2106.06548](#)
35. **Millicharged Particles from the Heavens: Single- and Multiple-Scattering Signatures**
Carlos A. Argüelles Delgado, **KJK**, Victor Muñoz.
JHEP 11 (2021) 099. [arXiv:2104.13924](#)
34. **Light, Long-Lived $B - L$ Gauge and Higgs Bosons at the DUNE Near Detector**
P.S. Bhupal Dev, Bhaskar Dutta, **KJK**, Rabindra N. Mohapatra, Yongchao Zhang.
JHEP 07 (2021) 166. [arXiv:2104.07681](#).
33. **Three-Body Decays of Heavy Dirac and Majorana Fermions**
André de Gouvêa, Patrick J. Fox, Boris Kayser, **KJK**.
Phys. Rev. **D104** (2021) no. 1, 015038. [arXiv:2104.05719](#)
32. **LEvEL: Low-Energy Neutrino Experiment at the LHC**
KJK Pedro A.N. Machado, Alberto Marchionni, Yuber F. Perez-Gonzalez.
JHEP 08 (2021) 87. [arXiv:2103.00009](#).
31. **Heavy Axion Opportunities at the DUNE Near Detector**
KJK, Soubhik Kumar, Zhen Liu.
Phys. Rev. **D103** (2021) no. 9, 095002. [arXiv:2011.05995](#).
30. **Intimate Relationship Between Sterile Neutrino Dark Matter and ΔN_{eff}**
KJK, Manibrata Sen, Yue Zhang.
Phys. Rev. **Lett.** **127** (2021) no. 4, 041101. [arXiv:2011.02487](#).
29. **Current and Future Neutrino Oscillation Constraints on Leptonic Unitarity**
Sebastian A. R. Ellis, **KJK**, Shirley Weishi Li.
JHEP 12 (2020) 068. [arXiv:2008.01088](#).
28. **Back to (Mass-)Square(d) One: The Neutrino Mass Ordering in Light of Recent Data**
KJK, Pedro A. N. Machado, Stephen J. Parke, Yuber F. Perez-Gonzalez, Renata Zukanovich Funchal.
Phys. Rev. **D103** (2021) no. 1, 013004. [arXiv:2007.08526](#).
27. **Origin of Sterile Neutrino Dark Matter via Vector Secret Neutrino Interactions**
KJK, Manibrata Sen, Walter Tangarife, Yue Zhang.
Phys. Rev. **D101** (2020) no. 11, 115031. [arXiv:2005.03681](#).
26. **Leptonic Unitarity Triangles**
Sebastian A.R. Ellis, **KJK** Shirley Weishi Li.
Phys. Rev. **D102** (2020) no. 11, 115027. [arXiv:2004.13719](#).
25. **Searches for Decays of New Particles in the DUNE Multi-Purpose Near Detector**
Jeffrey M. Berryman, André de Gouvêa, Patrick J. Fox, Boris J. Kayser, **KJK**, Jennifer L. Raaf.
JHEP 02 (2020) 174. [arXiv:1912.07622](#).
24. **Prospects of Measuring Oscillated Decay-at-Rest Neutrinos at Long Baselines**
Roni Harnik, **KJK**, Pedro A.N. Machado.
Phys. Rev. **D101** (2020) no. 3, 033008. [arXiv:1911.05088](#).

23. **White Paper on New Opportunities at the Next-Generation Neutrino Experiments (Part 1: BSM Neutrino Physics and Dark Matter)**
C.A. Argüelles et. al. (incl. **KJK**)
arXiv:[1907.08311](#).
22. **Neutrino Non-Standard Interactions: A Status Report**
P.S. Bhupal Dev, K.S. Babu, Peter B. Denton, Pedro A.N. Machado et. al. (incl. **KJK**)
SciPost Phys. Proc. 2 (2019) 001. arXiv:[1907.00991](#).
21. **Constraining the Self-Interacting Neutrino Interpretation of the Hubble Tension**
Nikita Blinov, **KJK**, Gordan Z. Krnjaic, Samuel D. McDermott.
Phys. Rev. **Lett.** **123** (2019) no. 19, 191102. arXiv:[1905.02727](#).
20. **Physics with Beam Tau-Neutrino Appearance at DUNE**
André de Gouvêa, **KJK** G.V. Stenico, Pedro Pasquini.
Phys. Rev. **D100** (2019) no. 1, 016004. arXiv:[1904.07265](#).
19. **Sub-GeV Atmospheric Neutrinos and CP-Violation in DUNE**
KJK Pedro A.N. Machado, Iván Martinez-Soler, Stephen J. Parke, Yuber F Perez-Gonzalez.
Phys. Rev. **Lett.** **123** (2019) no. 8, 081801. arXiv:[1904.02751](#).
18. **Hunting On- and Off-Axis for Light Dark Matter with DUNE-PRISM**
Valentina De Romeri, **KJK**, Pedro A.N. Machado.
Phys. Rev. **D100** (2019) no. 9, 095010. arXiv:[1903.10505](#).
17. **Mono-Neutrino at DUNE: New Signals From Neutrinophilic Thermal Dark Matter**
KJK, Yue Zhang.
Phys. Rev. **D99** (2019) no. 5, 055034. arXiv:[1901.01259](#).
16. **Proton Fixed-Target Scintillation Experiment to Search for Minicharged Particles**
KJK, Yu-Dai Tsai.
Phys. Rev. **D100** (2019) no. 1, 015043. arXiv:[1812.03998](#).
15. **Dark Tridents at Off-Axis Liquid Argon Neutrino Detectors**
André de Gouvêa, Patrick J. Fox, Roni Harnik, **KJK**, Yue Zhang.
JHEP 1901 (2019) 001. arXiv:[1809.06388](#).
14. **Multimessenger Astronomy and New Neutrino Physics**
KJK, Pedro A.N. Machado.
JCAP 1810 (2018) no.10, 048. arXiv:[1808.02889](#).
13. **Shining light on the mass scale and nature of neutrinos with $e\gamma \rightarrow e\nu\bar{\nu}$**
Jeffrey M. Berryman, André de Gouvêa, **KJK**, Michael Schmitt.
Phys. Rev. **D98** (2018) no.1, 016009. arXiv:[1805.10294](#).
12. **Matter Density Profile Shape Effects at DUNE**
KJK, Stephen J. Parke.
Phys. Rev. **D98** (2018) no.1, 015025. arXiv:[1802.06784](#).
11. **Lepton-Number-Charged Scalars and Neutrino Beamstrahlung**
Jeffrey M. Berryman, André de Gouvêa, **KJK**, Yue Zhang.
Phys. Rev. **D97** (2018) no.7, 075030. arXiv:[1802.00009](#).
10. **Neutrino versus antineutrino oscillation parameters at DUNE and Hyper-Kamiokande experiments**
André de Gouvêa, **KJK**.
Phys. Rev. **D96** (2017) no.9, 095018. arXiv:[1709.06090](#).
9. **Dark Matter and Neutrino Mass from the Smallest Non-Abelian Chiral Dark Sector**
Jeffrey M. Berryman, André de Gouvêa, **KJK**, Yue Zhang.
Phys. Rev. **D96** (2017) no.7, 075010. arXiv:[1706.02722](#).

8. **Searches for new physics at the Hyper-Kamiokande experiment**
KJK
Phys. Rev. **D95** (2017) no.11, 115009. arXiv:[1703.00448](#).
7. **Lepton-number-violating searches for muon to positron conversion**
Jeffrey M. Berryman, André de Gouvêa, **KJK**, Andrew Kobach.
Phys. Rev. **D95** (2017) no.11, 115010. arXiv:[1611.00032](#).
6. **False Signals of CP-Invariance Violation at DUNE**
André de Gouvêa, **KJK**.
arXiv:[1605.09376](#).
5. **Imperfect mirror copies of the standard model**
Jeffrey M. Berryman, André de Gouvêa, Daniel Hernández, **KJK**
Phys. Rev. **D94** (2016) no.3, 035009. arXiv:[1605.03610](#).
4. **Large extra dimensions at the Deep Underground Neutrino Experiment**
Jeffrey M. Berryman, André de Gouvêa, **KJK**, O.L.G. Peres, Zahra Tabrizi.
Phys. Rev. **D94** no.3, 033006. arXiv:[1603.00018](#).
3. **Non-standard neutrino interactions at DUNE**
André de Gouvêa, **KJK**.
Nucl. Phys. **B908**, 318 (2016). arXiv:[1511.05562](#).
2. **Sterile neutrino at the Deep Underground Neutrino Experiment**
Jeffrey M. Berryman, André de Gouvêa, **KJK**, Andrew Kobach.
Phys. Rev. **D92** (2015) no.7, 073012. arXiv:[1507.03986](#).
1. **CP-invariance violation at short-baseline experiments in 3+1 neutrino scenarios**
André de Gouvêa, **KJK**, Andrew Kobach.
Phys. Rev. **D91** (2015) no.5, 053005. arXiv:[1412.1479](#).

SEMINARS & COLLOQUIUA

Fermilab Neutrino University 2023

August 2023

“What do we do with neutrino data?”

NYU CCPP HEP Seminar

March 2023

“New Thoughts on an Old Anomaly”

LANL T2 Seminar

November 2022

“Sterile or No? What’s going on with the short-baseline anomalies”

IFIC Seminar

May 2022

“The Future of Heavy Neutral Lepton Searches”

UCSB HEX-HET Seminar

April 2022

“The Forward Physics Facility and New(?) Neutrino Physics”

UAB IFAE TH Seminar

March 2022

“What we’ll (hopefully) learn from Neutrino Experiments in the Next Decade”

CERN-TH BSM Forum

March 2022

“Looking for right-handed neutrinos in all the wrong(?) places”

Wayne State University Particle-Astro-Nuclear Seminar

Remote, February 2022

“Where we’re going with Neutrino Oscillation Experiments”

HEP/Astro Results Forum

December 2021

“Overview of Neutrino Anomalies”. Slides/video available at [this https URL](#)

Fermilab Joint Experimental-Theoretical Physics Seminar (Wine & Cheese)

October 2021

“ArgoNeuT’s Search for Heavy Neutral Leptons,” presented together with Patrick Green

Texas A&M University Physics & Astronomy Colloquium

Remote, April 2021

“Neutrinos and Dark Matter on a Collision Course”

Johns Hopkins University/University of Maryland Joint Seminar

Remote, February 2021

University of Michigan LCTP Seminar

Remote, January 2021

Ohio State University CCAPP Seminar

Remote, December 2020

“Self-Interacting Neutrinos, from the Lab to the Cosmos”

Fermilab Neutrino Seminar

Remote, December 2020

BSM PANDEMIC Seminar

Remote, November 2020

“Neutrino Oscillations: Where we are, where we’re going”

University of Pittsburgh High-Energy Physics Seminar

Remote, November 2020

University of Wisconsin High-Energy/Cosmology Seminar

Remote, November 2020

University of Minnesota High Energy Physics Seminar

Remote, October 2020

“Heavy Neutrinos and Where to Find Them”

Korea Institute for Advanced Study High Energy Physics Seminar

Remote, July 2020

“Self-Interacting Neutrinos, The Hubble Tension, and Sterile Neutrino Dark Matter”

SLAC Elementary Particle Physics Seminar

Remote, June 2020

“Leptonic Unitarity from Neutrino Oscillations: Current & Future Status”

Brookhaven National Lab High Energy Theory Seminar

Remote, May 2020

“Dark Sector Decays in the DUNE Multipurpose Near Detector”

Lawrence Berkeley National Lab Particle Physics Seminar

Berkeley, CA, December 2019

Texas A&M Mitchell Institute High Energy Seminar

College Station, TX, December 2019

“New Physics Searches at the DUNE Near Detector”

Argonne National Lab Theory Seminar

Argonne, IL, April 2019

Fermilab Theory Seminar

Batavia, IL, March 2019

Fermilab Neutrino Seminar Series

Batavia, IL, January 2018

“How much does matter matter at DUNE?”

Northwestern University

Evanston, IL, November 2017

“Independent Determination of Oscillation Parameters for Neutrinos and Antineutrinos”

University of Illinois at Chicago High Energy Physics Seminar

Chicago, IL, November 2017

“Chiral Gauge Theories for Dark Sector Construction”

Indiana University High Energy Physics Seminar

Bloomington, IN, March 2017

University of Notre Dame High Energy Physics Seminar

Notre Dame, IN, January 2017

Argonne National Lab Theory Seminar

Argonne, IL, January 2017

Fermilab Theory Seminar

Batavia, IL, September 2016

“New Physics Searches at DUNE”

Northwestern University

Evanston, IL, 2014-2016

“CP Violation from a Fourth Neutrino?”

“Sterile Neutrinos at DUNE”

“Non-Standard Neutrino Interactions”

CONFERENCE PRESENTATIONS

Forward Physics Facility Theory Workshop

September 2023. Virtual speaker: “BSM Physics Opportunities with LHC Neutrino Beams”

WIN2023

July 2023. Virtual speaker: “Light Sterile Neutrinos at Neutrino Oscillation Experiments”

CETUP* 2023

July 2023. Speaker: “Fun with Low-Energy Atmospheric Neutrinos”

DUNE Phase II Near Detector Workshop

June 2023. Virtual speaker: “Dark Matter & Dark Sector Searches DUNE Phase II”

Fermilab ACE Science Workshop

June 2023. Virtual speaker: “Neutrinos Detectors & Dark Sectors”

Path to Dark Sector Discoveries at Neutrino Experiments

June 2023. Virtual speaker: “Non-Oscillation Theory at Near Detectors”

CERN Neutrino Platform Pheno Week 2023

March 2023. Virtual speaker: “Problematic Pion-Induced Photons at MiniBooNE”

Pitt PACC 2022: Nu Tools for BSM at Neutrino Beam Facilities

December 2022. Invited speaker: “MiniBooNE Anomaly: Status and BSM”

Snowmass22 Community Summer Study

July 2022. Invited speaker: “DUNE Phase II and Dark Matter.”

Panelist: “NF02: Understanding Experimental Neutrino Anomalies.”

Invisibles22 Workshop

June 2022, IJCLab (Saclay). Invited speaker: “New physics searches at neutrino facilities.”

Extended Workshop NuTs 2022

May/June 2022, UAM IFT (Madrid). Invited speaker: “Going NuTs over the short baseline anomalies”

Snowmass Joint Workshop on New Physics Opportunities with Neutrino Experiments: Theoretical & Experimental Perspectives

Remote Conference, February 2022. “Decays of New-Physics Particles at the DUNE Near Detector(s)”

SBN-TH Mini-Workshop

Remote Conference, December 2021. Invited speaker: “The MiniBooNE Anomaly”

IRN Neutrino Meeting 2021

December 2021. Invited speaker: “One Theorist’s Take on the Recent Short-Baseline Results”

NuTau2021 (Workshop on Tau Neutrinos from GeV to EeV 2021)

Remote conference, September-October 2021. Speaker: “Learning from Tau Neutrino Appearance at Long Baselines”

TAUP 2021 (Topics in Astroparticle and Underground Physics)

Remote conference, August-September 2021. Speaker: “Heavy Dirac/Majorana Fermion Decays,” recording available at [this link](#).

EPS-HEP 2021 (European Physical Society conference on high energy physics)

Remote conference, July 2021. Speaker: “The DUNE Near Detector Complex as a Beam Dump Facility”

Forward Physics Facility Meeting #2

Remote conference, May 2021. Speaker: “Low-energy LHC Neutrinos”

Pheno2021

Remote conference, May 2021. Speaker: “Decays of Dirac/Majorana Fermions”

PIKIMO10

Remote conference, April 2021. Speaker: “LEvEL: Low-Energy Neutrino Experiment at the LHC”

Dark Matter as a Portal to New Physics 2021

Remote conference, February 2021. Invited speaker: “Searched for Dark Sectors in Neutrino Experiments”

Snowmass 2021 Artificial Neutrino Sources Meeting

Remote conference, December 2020. Invited speaker: “New-Physics Searches at Beam Dump Experiments”

LEPLAr: Low-Energy Physics in Liquid Argon

Remote conference, November 2020. Invited speaker: “MeV-Scale Features in BSM Searches”

PIKIMO9

Remote conference, October 2020. Speaker: “Decays of Dirac and Majorana Heavy Neutral Leptons”

Snowmass 2021 Community Planning Meeting

Invited speaker, parallel session on dark sector searches.

Snowmass 2021 Neutrino BSM Kick-off

Invited speaker: “Dark Sectors at Neutrino Experiments”

New Perspectives 2020

Remote conference, August 2020. Speaker: “Leptonic Unitarity: Current and Future”

PROSPECT Oscillation Workshop

August 2020. Invited speaker: “Short-baseline/Long-baseline Oscillation Measurement Interplay: A Theorist’s Perspective”

Fermilab Users Meeting 2020

Remote conference, August 2020. Plenary Speaker: “Neutrino Theory Post-Nu2020”

Neutrino2020

Remote conference, June 2020. Poster Presented: “Searches for Dark Sector Mediators in the DUNE Multi-Purpose Near Detector.” Associated video available [here](#).

Neutrinos from the Lab to the Cosmos

Institute for Nuclear Theory, University of Washington, January 2020. Speaker: “New Neutrino Physics at Long-Baseline Experiments” Discussion leader: “Neutrinos and the Hubble Tension”

Precision Investigations in the Neutrino Sector (PINS) 2019

SLAC, July 2019. Speaker: “Sub-GeV Atmospheric Neutrinos and CP Violation”

SBND Collaboration Meeting 2019

Ann Arbor, June 2019. Remote speaker: “Missing Transverse Momentum Signatures in SBND”

Current Trends in Particle Theory (CTPT) 2019

Chicago, IL, June 2019

Fermilab New Perspectives Meeting 2019

Fermilab, 2019. Invited speaker: “Neutrino Theory in 10 Minutes”

New Directions in the Search for Light Dark Matter Particles

Fermilab, June 2019

NTN Workshop on Non-standard Neutrino Interactions

St. Louis, MO, May 2019. Speaker: "Light Dark Matter at DUNE"

DUNE Collaboration Meeting 2019

Fermilab, May 2019. Invited speaker: "Beyond the Standard Model Physics at the DUNE Near Detector"

LCTP Spring Neutrino Physics Symposium

Ann Arbor, MI, April 2019. Speaker: "Searches for Dark Matter with the DUNE Near Detector"

Discrete2018

Vienna, Austria, November 2018. Parallel session speaker: "Multimessenger Astronomy and New Neutrino Physics"

NuFact 2018

Blacksburg, VA, August 2018. Parallel session speaker: "Lepton-number-charged Scalars at DUNE"

Summer Institute for Neutrino Theory (SINT) 2017

Blacksburg, VA, July 2017

Pheno 2017

Pittsburgh, PA, May 2017. Parallel session speaker: "Lepton Number Violation and Muon-to-Positron Conversion"

Current Trends in Particle Theory (CTPT) 2017

Chicago, IL, March 2017. Poster presented: "Lepton Number Violation and Muon-to-Positron Conversion"

NuFact 2016

Quy Nhon, Vietnam, August 2016. Parallel session speaker: "New Physics Searches at DUNE"

Theoretical Advanced Summer Institute (TASI) 2016

Boulder, CO, June 2016

Nu@Fermilab

Batavia, IL, July 2015