**Education and Work**

**University of Michigan at Ann Arbor**  
- Associate Professor of Physics (with tenure)  
  Norman M. Leff Assistant Professor of Physics  
  Ann Arbor, MI  
  2021-present
- Research Scientist  
  Pappalardo Fellow in Physics  
  Cambridge, MA  
  2015-2021

**Massachusetts Institute of Technology**  
- Research Scientist  
  Pappalardo Fellow in Physics  
  New Haven, CT  
  2011-2014

**Yale University**  
- PhD, M.Phil., M.S., Physics  
  New Haven, CT  
  2006-2011

**University of Colorado at Boulder**  
- B.A. Physics and Astronomy (double major; *summa cum laude*)  
  Boulder, CO  
  2002-2006

**External Funding**

**Proposal to Study the Properties and Interactions of Elementary Particles (Co-PI)**  
- Source: Department of Energy  
  Period of award: 7/1/2024-3/31/2027  
  Award amount: $6,493,000 [Task N (PI): $475,000]

**DUNE Technical Design, Far Detector (PI)**  
- Source: Fermi National Accelerator Laboratory  
  Period of award: 1/1/2022-2/28/2025  
  Award amount: $131,298 (amended in 2023 and 2024)

**Toward a Measurement of the Atmospheric Neutrino Rate over Gigayear Timescales (PI)**  
- Source: Gordon E. and Betty I. Moore Foundation  
  Period of award: 9/1/2023-8/31/2028  
  Award amount: $1,250,000

**Known-Energy Neutrinos for Studying the Nature of Matter (PI)**  
- Source: Heising-Simons Foundation  
  Period of award: 1/1/2019-12/31/2024  
  Award amount: $988,369 (amended in 2021 and 2023)

**Engineering Development for Establishing IsoDAR (PI)**  
- Source: National Science Foundation  
  Period of award: 5/1/2021-4/30/2025  
  Award amount: $400,000

**Proposal to Study the Properties and Interactions of Elementary Particles (Co-PI)**  
- Source: Department of Energy  
  Period of award: 4/1/2021-3/31/2024  
  Award amount: $6,668,000 [Task N (PI): $478,000]
DUNE Technical Design, Far Detector (PI)
Source: Fermi National Accelerator Laboratory
- Period of award: 1/1/2020-6/30/2021
  Award amount: $29,200
Reconstructing Neutrino Data with the MicroBooNE Liquid Argon Detector (Co-PI)
Source: Department of Energy, Argonne Leadership Computing Facility (“Theta” Supercomputer)
- Award given in 2020
  Award amount: 200,000 node hours (computing)
DUNE Technical Design, Far Detector (PI)
Source: Fermi National Accelerator Laboratory
- Period of award: 10/1/2018-12/31/2019
  Award amount: $57,253
Proposal to Study the Properties and Interactions of Elementary Particles (Co-PI)
Source: Department of Energy
- Period of award: 4/1/2018-3/31/2021
  Award amount: $7,301,000 [Task N (PI): $315,000]

Selected External Awards and Service

- Gordon and Betty Moore Foundation Experimental Physics Investigator, 2023-present.
- MicroBooNE Physics Advisory Board, 2022-present.
- JSNS² Physics Analysis Co-coordinator, 2021-present.
- IsoDAR Co-spokesperson, 2021-present.
- IsoDAR Physics Analysis Coordinator, 2017-2021.
- Institutional Board of JSNS², SBN, MicroBooNE, and DUNE.
- Snowmass HEP Community Planning Process Co-convener for the Neutrino Frontier Topical Working Group “Artificial Neutrino Sources: Beams, Reactors, and Novel Sources”, 2020-2023.
- DOE Office of Science (High Energy Physics and Nuclear Physics) Panel and/or Mail-in Reviewer, 2017, 2018, 2019, 2021, 2022, 2023, 2024.
- DOE/SC CD-2/3C HL-LHC CMS Reviewer, 2023.
- Natural Sciences and Engineering Research Council of Canada (NSERC) Reviewer, 2023.
- Reviewer for Physical Review Letters, Physical Review D, Advances in High Energy Physics, Journal of Instrumentation, Nuclear Instruments and Methods in Physics Research A, and International Journal of Modern Physics A.
- ICARUS Experiment at Fermilab Operational Readiness Reviewer, 2020.
- Co-Host, Snowmass Neutrino Frontier Workshop on Artificial Neutrino Sources (~100 virtual attendees), 2020.
- Student-nominated for the Golden Apple Teaching Award, University of Michigan, 2017, 2019, 2020.
- MicroBooNE Technical Board, 2016-2020.
- Host, SBND Collaboration Meeting (~50 attendees) at University of Michigan, 2019.
Co-Host, 7th LCTP Spring Symposium: Neutrino Physics (~50 attendees) at University of Michigan, 2019.

US-Israel Binational Science Foundation Reviewer, 2019.

DUNE Far Detector Technical Design Report Internal Reviewer, 2019.

MicroBooNE Talks Committee Chair, 2017-2019.

Co-Host, Beyond Standard Model Physics with Neutrino Driven Sources Workshop (~30 attendees) at MIT, 2018.

Host, MicroBooNE Software Workshop (~50 attendees) at University of Michigan, 2016.

Host, JSNS² Collaboration Meeting at University of Michigan, 2016.

MicroBooNE Talks Committee Chair, 2017-2019.

Co-Host, Beyond Standard Model Physics with Neutrino Driven Sources Workshop (~30 attendees) at MIT, 2018.

Host, MicroBooNE Software Workshop (~50 attendees) at University of Michigan, 2016.

Host, JSNS² Collaboration Meeting at University of Michigan, 2016.

Pappalardo Fellowship at MIT, 2011.

ArgoNeuT Run Coordinator, 2009-2010.

Organizing Committee (co-chair), New Perspectives Conference at Fermilab, 2009.

American Association of Physics Teachers Outstanding Teaching Assistant of the Year, 2009.

Graduate Student Association at Fermilab, Elected Representative, 2008-2009.

User’s Executive Committee at Fermilab, Graduate Representative, 2008-2009.

Selected Publications

†Publications with J. Spitz as corresponding author (20 total)

Michigan students with primary (led/co-led) or major contributions to a publication are underlined

†The Final Frontier for Proton Decay
1. S. Baum, C. Little, P. Sala, J. Spitz, and P. Stengel, arXiv:2405.15845. Submitted to Physical Review D.

The Width of an Electron-Capture Neutrino Wave Packet
2. B.J.P. Jones, E. Marzec, and J. Spitz, arXiv:2404.19746. Submitted to Physical Review D.

First Double-differential Cross section Measurement of Neutral-current π° Production in Neutrino-argon Scattering in the MicroBooNE Detector
3. P. Abratenko, ..., B. Bogart et al. [MicroBooNE Collaboration], arXiv:2404.10948. Submitted to Physical Review Letters.

First Simultaneous Measurement of Differential Muon-neutrino Charged-current Cross Sections on Argon for Final States With and Without Protons Using Micro-BooNE Data
4. P. Abratenko, ..., B. Bogart et al. [MicroBooNE Collaboration], Physical Review Letters 133 041801 (2024).

Inclusive Cross Section Measurements in Final States With and Without Protons for Charged-current νµ-Ar Scattering in MicroBooNE
5. P. Abratenko, ..., B. Bogart, ..., A. Pellot Jimenez et al. [MicroBooNE Collaboration], Physical Review D 110 013006 (2024).

†Neutrino Secrets Could Be Revealed By Earth’s Atmosphere
6. J. Spitz, Nature 625 243 (2024).
7. **New \( \mu \) Forces From \( \nu_\mu \) Sources**
   C. Cesarotti, Y. Kahn, G. Krnjaic, D. Rocha, and J. Spitz, arXiv:2311.10829. Submitted to Physical Review D.

8. **Width of a Beta-decay-induced Antineutrino Wavepacket**
   B.J.P. Jones, E. Marzec, and J. Spitz, Physical Review D 107 013008 (2023).

9. **Neutrino Decoherence and the Mass Hierarchy in the JUNO Experiment**
   E. Marzec and J. Spitz, Physical Review D 106 053007 (2022).

†**Neutrino Physics Opportunities with the IsoDAR Source at Yemilab**
J. Alonso, C.A. Argüelles, A. Bungau, J.M. Conrad, B. Dutta, Y.D. Kim, E. Marzec, D. Mishins, S.H. Seo, M. Shaevitz, J. Spitz, A. Thompson, L. Waites, and D. Winklehner, Physical Review D 105 052009 (2022).

**Search for an Excess of Electron Neutrino Interactions in MicroBooNE Using Multiple Final State Topologies**
10. P. Abratenko et al. [MicroBooNE Collaboration], Physical Review Letters 128 241801 (2022). *Selected as an “Editors’ Suggestion” and “Featured in Physics” [Physics 15 85 (2022)].*

11. **Search for an Anomalous Excess of Inclusive Charged-current \( \nu_e \) Interactions in the MicroBooNE Experiment using Wire-Cell Reconstruction**
    P. Abratenko et al. [MicroBooNE Collaboration], Physical Review D 105 112005 (2022). *Selected to be “Featured in Physics” [Physics 15 85 (2022)].*

12. **IsoDAR@Yemilab: A Report on the Technology, Capabilities, and Deployment**
    J.R. Alonso, D. Winklehner, J. Spitz, J.M. Conrad, S.H. Seo, Y.D. Kim, M. Shaevitz, A. Bungau, R. Barlow, L. Calabretta, A. Adelmann, D. Mishins, L. Bartoszek, L.H. Waites, K.M. Bang, and K.S. Park, Journal of Instrumentation 17 P09042 (2022).

13. **The JSNS\(^2\) Detector**
    S. Ajimura et al., Nuclear Instruments and Methods in Physics Research A 1014 165742 (2021).

14. **Modeling Quasielastic Interactions of Monoenergetic Kaon Decay-at-rest Neutrinos**
    A. Nikolakopoulos, V. Pandey, J. Spitz, and N. Jachowicz, Physical Review C 103 064603 (2021).

15. **Measurement of Space Charge Effects in the MicroBooNE LArTPC Using Cosmic Muons**
    P. Abratenko, ..., C. Barnes et al. [MicroBooNE Collaboration], Journal of Instrumentation 15 P12037 (2020).

†**Measuring Changes in the Atmospheric Neutrino Rate Over Gigayear Timescales**
17. J.R. Jordan, S. Baum, P. Stengel, A. Ferrari, M.C. Morone, P. Sala, and J. Spitz, Physical Review Letters 125 231802 (2020). *Selected to be “Featured in Physics” [Physics 13 186 (2020)].*

18. **First Measurement of Electron Neutrino Scattering Cross Section on Argon**
    R. Acciarri, ..., R. Fitzpatrick et al. [ArgoNeuT Collaboration], Physical Review D 102 011101(R) (2020).

19. **Deep Underground Neutrino Experiment (DUNE), Far Detector Technical Design Report, Volume IV Far Detector Single-phase Technology**
    B. Abi, ..., R. Fitzpatrick et al. [DUNE Collaboration], Journal of Instrumentation 15 T08010 (2020).

20. **Neutrino Flavor Transformations from New Short-Range Forces**
    B.J.P. Jones and J. Spitz, arXiv:1911.06342.

21. **First Measurement of Inclusive Muon Neutrino Charged Current Differential Cross Sections on Argon at \( E_\nu \sim 0.8 \) GeV with the MicroBooNE Detector**
    P. Abratenko et al. [MicroBooNE Collaboration], Physical Review Letters 123 131801 (2019).
†Severe Constraints on New Physics Explanations of the MiniBooNE Excess
22. J.R. Jordan, Y. Kahn, G. Krnjaic, M. Moschella, and J. Spitz, Physical Review Letters 122 081801 (2019). Selected as an “Editors’ Suggestion”.

Optimizing the $^8$Li Yield for the IsoDAR Neutrino Experiment
23. A. Bungau, J. Alonso, L. Bartoszek, J. Conrad, M. Shaevitz, and J. Spitz, Journal of Instrumentation 14 P03001 (2019).

†Signatures of Pseudo-Dirac Dark Matter at High-Intensity Neutrino Experiments
24. J.R. Jordan, Y. Kahn, G. Krnjaic, M. Moschella, and J. Spitz, Physical Review D 98 075020 (2018).

 Ionization Electron Signal Processing in Single Phase LArTPCs II. Data/Simulation Comparison and Performance in MicroBooNE
25. C. Adams, ..., C. Barnes et al. [MicroBooNE Collaboration], Journal of Instrumentation 13 P07007 (2018).

†First Measurement of Monoenergetic Muon Neutrino Charged Current Interactions
26. A.A. Aguilar-Arevalo, ..., R. Fitzpatrick, ..., J.R. Jordan et al. [MiniBooNE Collaboration], Physical Review Letters 120 141802 (2018). Selected as an “Editors’ Suggestion” and “Featured in Physics” [Physics 11 35 (2018)].

Determination of Muon Momentum in the MicroBooNE LArTPC Using an Improved Model of Multiple Coulomb Scattering
27. P. Abratenko et al. [MicroBooNE Collaboration], Journal of Instrumentation 12 P10010 (2017).

Design and Construction of the MicroBooNE Detector
28. R. Acciarri et al. [MicroBooNE Collaboration], Journal of Instrumentation 12 P02017 (2017).

†Viewpoint: Ghostly Neutrino Comes into Sharper Focus
29. J. Spitz, Physics 9 39 (2016).

†Demonstrating a Directional Detector Based on Neon for Characterizing High Energy Neutrons
30. A. Hexley, M.H. Moulai, J. Spitz, and J.M. Conrad, Journal of Instrumentation 10 P11010 (2015).

Decisive Disappearance Search at High-$\Delta m^2$ with Monoenergetic Muon Neutrinos
31. S. Axani, G. Collin, J.M. Conrad, M.H. Shaevitz, J. Spitz, and T. Wongjirad, Physical Review D 92 092010 (2015).

Annual Modulation of Cosmic Relic Neutrinos
32. B.R. Safdi, M. Lisanti, J. Spitz, and J.A. Formaggio, Physical Review D 90 043001 (2014).

†Cross Section Measurements with Monoenergetic Muon Neutrinos
33. J. Spitz, Physical Review D 89 073007 (2014).

Precision $\bar{\nu}_e-$electron Scattering Measurements with IsoDAR to Search for New Physics
34. J.M. Conrad, M.H. Shaevitz, I. Shimizu, J. Spitz, M. Toups, and L. Winslow, Physical Review D 89 072010 (2014).

Sterile Neutrino Fits to Short Baseline Neutrino Oscillation Measurements
35. J.M. Conrad, C.M. Ignarra, G. Karagiorgi, M. Shaevitz, and J. Spitz, Advances in High Energy Physics 2013 163897 (2013).

†Search for Neutrino-Antineutrino Oscillations with a Reactor Experiment
36. J.S. Díaz, T. Katori, J. Spitz, and J.M. Conrad, Physics Letters B 727 412 (2013).

Analysis of a Large Sample of Neutrino-Induced Muons with the ArgoNeuT Detector
37. C. Anderson et al. [ArgoNeuT Collaboration], Journal of Instrumentation 7 10020 (2012).

†First Test of Lorentz Violation with a Reactor-based Antineutrino Experiment
38. Y. Abe et al. [Double Chooz Collaboration], Physical Review D 86 112009 (2012).
The ArgoNeuT Detector in the NuMI Low-Energy Beam Line at Fermilab

C. Anderson et al. [ArgoNeuT Collaboration], Journal of Instrumentation 7 10019 (2012).

†Proposal for an Electron Antineutrino Disappearance Search Using High-Rate $^8$Li Production and Decay

A. Bungau et al., Physical Review Letters 109 141802 (2012). Selected to be “Featured in Physics”.

†Sterile Neutrino Search with Kaon Decay at Rest

J. Spitz, Physical Review D 85 093020 (2012).

†Measuring Active-to-Sterile Neutrino Oscillations with Neutral Current Coherent Neutrino-Nucleus Scattering

A.J. Anderson, J.M. Conrad, E. Figueroa-Feliciano, C. Ignarra, G. Karagiorgi, K. Scholberg, M.H. Shaevitz, and J. Spitz, Physical Review D 86 013004 (2012).

†First Measurements of Inclusive Muon Neutrino Charged Current Differential Cross Sections on Argon

C. Anderson et al. [ArgoNeuT Collaboration], Physical Review Letters 108 161802 (2012).

†Coherent Neutrino Scattering in Dark Matter Detectors

A.J. Anderson, J.M. Conrad, E. Figueroa-Feliciano, K. Scholberg, and J. Spitz, Physical Review D 84 013008 (2011).

†Atmospheric Tau Neutrinos in a Multi-kiloton Liquid Argon Detector

J. Conrad, A. de Gouveia, S. Shalgar, and J. Spitz, Physical Review D 82 093012 (2010).

†Renaissance of the $\sim$1-TeV Fixed-Target Program

T. Adams et al., International Journal of Modern Physics A 25 777 (2010).

†A Regenerable Filter for Liquid Argon Purification

A. Curioni, B.T. Fleming, W. Jaskierny, C. Kendziora, J. Krider, S. Purdes, M. Soderberg, J. Spitz, T. Tope, and T. Wongjirad, Nuclear Instruments and Methods in Physics Research A 605 306 (2009).

Other Publications

‡=Publications with J. Spitz as formal internal reviewer
Conference proceedings and unpublished whitepapers are not listed for brevity; See inspirehep.net/authors/1054783.

Supernova Pointing Capabilities of DUNE

A. Abed Abud et al. [DUNE Collaboration], arXiv:2407.10339. Submitted to Physical Review D.

Demonstration of Neutron Identification in Neutrino Interactions in the MicroBooNE Liquid Argon Time Projection Chamber

P. Abratenko et al. [MicroBooNE Collaboration], arXiv:2406.10583. Submitted to Physical Review D.

Improving Neutrino Energy Estimation of Charged-current Interaction Events with Recurrent Neural Networks in MicroBooNE

P. Abratenko et al. [MicroBooNE Collaboration], arXiv:2406.10123. Submitted to Physical Review D.

Scintillation Light in SBND: Simulation, Reconstruction, and Expected Performance of the Photon Detection System

P. Abratenko et al. [SBND Collaboration], arXiv:2406.07514. Submitted to European Physical Journal C.
Measurement of the Differential Cross Section for Neutral Pion Production in Charged-current Muon Neutrino Interactions on Argon with the MicroBooNE Detector
P. Abratenko et al. [MicroBooNE Collaboration], arXiv:2404.09949. Submitted to Physical Review D.

Evaluation of the Performance of the Event Reconstruction Algorithms in the JSNS2 Experiment Using a $^{252}$Cf Calibration Source
D.H. Lee et al. [JSNS2 Collaboration], arXiv:2404.04153. Submitted to Nuclear Instruments and Methods in Physics Research A.

Pulse Shape Discrimination in JSNS2
T. Dodo et al. [JSNS2 Collaboration], arXiv:2404.03679. Submitted to Journal of Instrumentation.

Measurement of Double-differential Cross Sections for Mesonless Charged-current Muon Neutrino Interactions on Argon with Final-state Protons Using the MicroBooNE Detector
P. Abratenko et al. [MicroBooNE Collaboration], arXiv:2403.19574. Submitted to Physical Review D.

Performance of a Modular Ton-scale Pixel-readout Liquid Argon Time Projection Chamber
A. Abed Abud et al. [DUNE Collaboration], arXiv:2403.03212. Submitted to Journal of Instrumentation.

Doping Liquid Argon with Xenon in ProtoDUNE Single-Phase: Effects on Scintillation Light
A. Abed Abud et al. [DUNE Collaboration], arXiv:2402.01568. Submitted to Journal of Instrumentation.

First Search for Dark-trident Processes Using the MicroBooNE Detector
P. Abratenko et al. [MicroBooNE Collaboration], Physical Review Letters 131 241801 (2024).

Search for Heavy Neutral Leptons in Electron-positron and Neutral-pion Final States with the MicroBooNE Detector
P. Abratenko et al. [MicroBooNE Collaboration], Physical Review Letters 132 041801 (2024).

Measurement of Nuclear Effects in Neutrino-argon Interactions using Generalized Kinematic Imbalance Variables with the MicroBooNE Detector
P. Abratenko et al. [MicroBooNE Collaboration], Physical Review D 109 092007 (2024). Selected as an “Editors’ Suggestion”.

Physics Potential of a Few Kiloton Scale Neutrino Detector at a Deep Underground Lab in Korea
S. Seo, J. Alonso, P. Bakhti, J. Conrad, S. Dye, D. Kim, J. Migenda, M. Pallavicini, J. Park, M. Rajaee, M. Shaevitz, S. Shin, J. Spitz, D. Winklehner, S. Wronka, M. Wurm, and M. Yeh, arXiv:2309.13435. Submitted to Journal of Instrumentation.

The Acrylic Vessel for JSNS2-II Neutrino Target
D.H. Lee et al. [JSNS2 Collaboration], Journal of Instrumentation 18 T12001 (2023).

First Demonstration for a LArTPC-based Search for Intranuclear Neutron-antineutron Transitions and Annihilation in $^{40}$Ar using the MicroBooNE Detector
P. Abratenko et al. [MicroBooNE Collaboration], arXiv:2308.03924. Submitted to Physical Review D.

Study on the Accidental Background of the JSNS2 Experiment
D.H. Lee et al. [JSNS2 Collaboration], European Physical Journal C 84 409 (2024).
65. Measurement of Triple-differential Inclusive Muon-neutrino Charged-current Cross Section on Argon with the MicroBooNE Detector
   P. Abratenko et al. [MicroBooNE Collaboration], arXiv:2307.06413. Submitted to Physical Review D.

66. Measurement of Ambient Radon Daughter Decay Rates and Energy Spectra in Liquid Argon Using the MicroBooNE Detector
   P. Abratenko et al. [MicroBooNE Collaboration], arXiv:2307.03102. Accepted by Physical Review D.

67. First Measurement of $\eta$ Production in Neutrino Interactions on Argon with MicroBooNE
   P. Abratenko et al. [MicroBooNE Collaboration], arXiv:2305.16249. Accepted by Physical Review Letters.

68. First Demonstration of $\mathcal{O}(1\text{ns})$ Timing Resolution in MicroBooNE Liquid Argon Time Projection Chamber
   P. Abratenko et al. [MicroBooNE Collaboration], Physical Review D 108 052010 (2023).

69. Impact of Cross-section Uncertainties on Supernova Neutrino Spectral Parameter Fitting in the Deep Underground Neutrino Experiment
   A. Abed Abud et al. [DUNE Collaboration], Physical Review D 107 112012 (2023).

70. Snowmass White Paper: Beyond the Standard Model Effects on Neutrino Flavor
   C.A. Arguelles et al., European Physical Journal C 83 15 (2023).

71. Multi-differential Cross Section Measurements of $\nu_\mu$-Argon Quasielastic-like Reactions with the MicroBooNE Detector
   P. Abratenko et al. [MicroBooNE Collaboration], Physical Review D 108 053002 (2023).

72. First Double-differential Measurement of Kinematic Imbalance in Neutrino Interactions with the MicroBooNE Detector
   P. Abratenko et al. [MicroBooNE Collaboration], Physical Review Letters 131 101802 (2023).

73. First Constraints on Light Sterile Neutrino Oscillations From Combined Appearance and Disappearance Searches With the MicroBooNE Detector
   P. Abratenko et al. [MicroBooNE Collaboration], Physical Review Letters 130 011801 (2023).

74. Highly-parallelized Simulation of a Pixelated LArTPC on a GPU
   A. Abed Abud et al. [DUNE Collaboration], Journal of Instrumentation 18 P04034 (2023).

75. First Measurement of Quasi-elastic $\Lambda$ Baryon Production in Muon Anti-neutrino Interactions in the MicroBooNE Detector
   P. Abratenko et al. [MicroBooNE Collaboration], Physical Review Letters 130 231802 (2023).

76. First Measurement of Differential Cross Sections for Muon Neutrino Charged Current Interactions on Argon with a Two-proton Final State in the MicroBooNE Detector
   P. Abratenko et al. [MicroBooNE Collaboration], arXiv:2211.03734. Submitted to Physical Review Letters.

77. Identification and Reconstruction of Low-energy Electrons in the ProtoDUNE-SP Detector
   A. Abed Abud et al. [DUNE Collaboration], Physical Review D 107 092012 (2023).

78. Axionlike Particle Production at Beam Dump Experiments with Distinct Nuclear Excitation Lines
   L. Waites, A. Thompson, A. Bungau, J.M. Conrad, B. Dutta, W-C. Huang, D. Kim, M. Shaevitz, and J. Spitz, Physical Review D 107 095010 (2023).
79. First Constraints on Heavy QCD Axions with a Liquid Argon Time Projection Chamber using the ArgoNeuT Experiment
   R. Acciarri et al. [ArgoNeuT Collaboration], Physical Review Letters 130 221802 (2023). Selected as an “Editors’ Suggestion”.

80. Reconstruction of Interactions in the ProtoDUNE-SP Detector with Pandora
   A. Abed Abud et al. [DUNE Collaboration], European Physical Journal C 83 618 (2023).

81. Measurement of Neutral Current Single $\pi^0$ Production on Argon with the Micro-BooNE Detector
   P. Abratenko et al. [MicroBooNE Collaboration], Physical Review D 107 012004 (2023).

82. Final-state Pions in MicroBooNE
   P. Abratenko et al. [MicroBooNE Collaboration], Physical Review D 106 L051102 (2022).

83. Separation of Track- and Shower-like Energy Deposits in ProtoDUNE-SP Using a Convolutional Neural Network
   A. Abed Abud et al. [DUNE Collaboration], European Physical Journal C 82 903 (2022).

84. Argon TPC
   A. Abed Abud et al. [DUNE Collaboration], European Physical Journal C 82 618 (2022).

85. Observation of Radon Mitigation in MicroBooNE by a Liquid Argon Filtration System
   P. Abratenko et al. [MicroBooNE Collaboration], Journal of Instrumentation 17 P11022 (2022).

86. The Double Chooz Antineutrino Detectors
   H. de Kerret et al. [Double Chooz Collaboration], European Physical Journal C 82 804 (2022).

87. Cosmic Ray Muon Clustering for the MicroBooNE Liquid Argon Time Projection Chamber using sMask-RCNN
   P. Abratenko et al. [MicroBooNE Collaboration], Journal of Instrumentation 17 P09015 (2022).

88. MiniBooNE and MicroBooNE Combined Fit to a 3+1 Sterile Neutrino Scenario
   A.A. Aguilar-Arevalo et al. [MiniBooNE Collaboration], Physical Review Letters 129 201801 (2022).

89. Characterization of the Correlated Background for a Sterile Neutrino Search Using the First Dataset of the JSNS$^2$ Experiment
   Y. Hino et al. [JSNS$^2$ Collaboration], European Physical Journal C 82 331 (2022).

90. Novel Approach for Evaluating Detector-Related Uncertainties in a LArTPC Using MicroBooNE Data
   P. Abratenko et al. [MicroBooNE Collaboration], European Physical Journal C 82 454 (2022).

91. First Measurement of Energy-dependent Inclusive Muon Neutrino Charged-Current Cross Sections on Argon with the MicroBooNE Detector
   P. Abratenko et al. [MicroBooNE Collaboration], Physical Review Letters 128 151801 (2022).

92. Wire-Cell 3D Pattern Recognition Techniques for Neutrino Event Reconstruction in Large LArTPCs: Algorithm Description and Quantitative Evaluation with Micro-BooNE Simulation
   P. Abratenko et al. [MicroBooNE Collaboration], Journal of Instrumentation 17 P01037 (2022).

93. New CC0$\pi$ GENIE Tune for MicroBooNE
   P. Abratenko et al. [MicroBooNE Collaboration], Physical Review D 105 072001 (2022).
Search for an Anomalous Excess of Charged-current $\nu_e$ Interactions without Pions in the Final State with the MicroBooNE Experiment

95. P. Abratenko et al. [MicroBooNE Collaboration], Physical Review D 105 112004 (2022). Selected to be “Featured in Physics” [Physics 15 85 (2022)].

Search for an Anomalous Excess of Charged-current Quasi-elastic $\nu_e$ Interactions with the MicroBooNE Experiment using Deep-Learning-based Reconstruction

96. P. Abratenko et al. [MicroBooNE Collaboration], Physical Review D 105 112003 (2022). Selected to be “Featured in Physics” [Physics 15 85 (2022)].

Design, Construction and Operation of the ProtoDUNE-SP Liquid Argon TPC

97. A. Abed Abud et al. [DUNE Collaboration], Journal of Instrumentation 17 P01005 (2022).

Search for Neutrino-Induced Neutral Current $\Delta$ Radiative Decay in MicroBooNE and a First Test of the MiniBooNE Low Energy Excess Under a Single-Photon Hypothesis

98. P. Abratenko et al. [MicroBooNE Collaboration], Physical Review Letters 128 111801 (2022). Selected as an “Editors’ Suggestion”.

First Measurement of Inclusive Electron-Neutrino and Antineutrino Charged Current Differential Cross Sections in Charged Lepton Energy on Argon in MicroBooNE

99. P. Abratenko et al. [MicroBooNE Collaboration], Physical Review D 105 L051102 (2022).

A Deep-Learning Based Raw Waveform Region-of-interest Finder for the Liquid Argon Time Projection Chamber

100. R. Acciarri et al. [ArgoNeuT Collaboration], Journal of Instrumentation 17 P01018 (2022).

Low Exposure Long-baseline Neutrino Oscillation Sensitivity of the DUNE Experiment

101. A. Abed Abud et al. [DUNE Collaboration], Physical Review D 105 072006 (2022).

Electromagnetic Shower Reconstruction and Energy Validation with Michel Electrons and $\pi^0$ Samples for the Deep-Learning-Based Analyses in MicroBooNE

102. P. Abratenko et al. [MicroBooNE Collaboration], Journal of Instrumentation 16 T12017 (2021).

IsoDAR@Yemilab: A Conceptual Design Report for the Deployment of the Isotope Decay-At-Rest Experiment in Korea’s New Underground Laboratory, Yemilab

103. J.R. Alonso et al. [IsoDAR Collaboration], arXiv:2110.10635.

Calorimetric Classification of Track-like Signatures in Liquid Argon TPCs using MicroBooNE Data

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192. A Search for Muon Neutrino and Antineutrino Disappearance in MiniBooNE
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Selected Colloquium/Seminar/Conference/Workshop Presentations

1. Using Ancient Rocks to Look for Atmospheric Neutrinos
   High Energy Physics Seminar, Michigan State University, 4/30/2024.

2. The IsoDAR Experiment
   Neutrinos From Home Conference (virtual), 4/23/2024.

3. Using Ancient Rocks to Look for Atmospheric Neutrinos
   Particle Physics Seminar, Wayne State University, 4/19/2024.

4. Using Ancient Rocks to Look for Atmospheric Neutrinos
   Society of Physics Students Seminar, University of Michigan, 4/11/2024.

5. Imaging Atmospheric Neutrinos with Paleo-detectors
   Mineral Detection of Neutrinos and Dark Matter Workshop, Virginia Tech, plenary, 1/10/2024.

6. Neutrino Beams and Fluxes II
   International Neutrino Summer School, lecture, Fermilab, 8/8/2023.

7. Neutrino Beams and Fluxes I
   International Neutrino Summer School, lecture, Fermilab, 8/7/2023.

8. How Often Do Muon Neutrinos Turn Into Electron Neutrinos?
   REU Seminar, University of Michigan, 8/1/2023.

9. The KPIPE Concept: Searching for Muon Neutrino Disappearance with Kaon Decay-at-Rest
   Fermilab Accelerator Complex Evolution Science Workshop (virtual), 5/15/2023.

10. Fundamental Physics Applications of Cyclotrons
    Application of High Current Cyclotrons Workshop (virtual), 4/25/2023.

11. The IsoDAR Experiment
    APS April Meeting (virtual), 4/24/2023.

12. Artificial Neutrino Sources
    Neutrino University Lecture, Fermilab, 7/28/2022.

13. How Often Do Muon Neutrinos Turn Into Electron Neutrinos?
    REU Seminar, University of Michigan, 7/5/2022.

14. Prospects for New eV-scale Sterile Neutrino Searches
    International Conference on Neutrino Physics and Astrophysics (NEUTRINO), plenary (joint with D. Winklehner), Seoul, Korea (virtual), 6/1/2022.

15. How Often Do Muon Neutrinos Turn Into Electron Neutrinos?
    Pappalardo Seminar Series, MIT, 3/9/2022.

16. MicroBooNE’s First Results: Addressing a 5σ Anomaly with a Precision Detector
    High Energy Physics Seminar, University of Virginia, 3/2/2022.

17. How Often Do Muon Neutrinos Turn Into Electron Neutrinos?
    Society of Physics Students Seminar, University of Michigan, 12/1/2021.

18. MicroBooNE’s First Results: Addressing a 5σ Anomaly with a Precision Detector
    High Energy Physics Seminar, University of Michigan, 11/15/2021.

19. An Application of High Power Cyclotrons in Physics: IsoDAR
    Snowmass Workshop on High Power Cyclotrons (virtual), 9/8/2021.

20. IsoDAR Physics at Yemilab
    Sterile Neutrino Search Underground Workshop, Institute for Basic Science in Korea (virtual), 7/1/2021.
21. **IsoDAR at Yemilab**  
Institute for Basic Science (Korea), Center for Underground Physics Seminar (virtual), 4/13/2021.

22. **The Neutrino, Still Crazy After All These Years**  
Physics Department Colloquium, State University of New York at Albany (virtual), 11/6/2020.

23. **How Often Do Muon Neutrinos Turn Into Electron Neutrinos?**  
Physics Department Colloquium, University of Michigan (virtual), 9/23/2020.

24. **The Neutrino, Still Crazy After All These Years**  
Nuclear and Particle Physics Colloquium, MIT (virtual), 9/14/2020.

25. **Completing Our Picture of the Neutrino**  
Physics Department Colloquium, Illinois Institute of Technology, 3/5/2020.

26. **Taking a Picture of a Neutrino**  
Society of Physics Students Seminar, University of Michigan, 2/20/2020.

27. **Review and Summary of Short Baseline Neutrino Experiments**  
International Workshop on Neutrinos from Accelerators (NuFACT), plenary, Daegu, Korea, 8/26/2019.

28. **Accelerator-based Neutrino Experiments at Short Baselines**  
International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY), parallel, Corpus Christi, TX, 5/20/2019.

29. **Completing Our Picture of the Neutrino**  
Physics Department Colloquium, Columbia University, 5/6/2019.

30. **Short Baseline Neutrino Experiments: Overview and Outlook**  
Aspen Winter Conference: In Pursuit of New Particles and Paradigms, plenary, Aspen, CO, 3/28/2019.

31. **Completing Our Picture of the Neutrino**  
Physics Department Colloquium, University of Maryland, 12/4/2018.

32. **KDAR and IsoDAR**  
Neutrino-Nucleus Interactions Conference (NuInt), plenary, L’Aquila, Italy, 10/17/2018.

33. **The JSNS² Experiment and the First Measurement of the KDAR Neutrino**  
High Energy Physics Seminar, Colorado State University, 8/6/2018.

34. **Taking a Picture of a Neutrino**  
REU Seminar, University of Michigan, 7/10/2018.

35. **First Measurement of Monoenergetic Muon Neutrino Charged Current Interactions**  
Physics Division Seminar (“Research Progress Meeting”), Lawrence Berkeley National Laboratory, 6/21/2018.

36. **First Measurement of Monoenergetic Muon Neutrino Charged Current Interactions**  
Subatomic Physics Seminar, Los Alamos National Laboratory, 6/6/2018.

37. **First Measurement of Monoenergetic Muon Neutrino Charged Current Interactions**  
Joint Experimental-Theoretical Physics Seminar (“Wine and Cheese”), Fermilab, 5/11/2018.

38. **First Measurement of Monoenergetic Muon Neutrino Charged Current Interactions**  
High Energy Physics Seminar, University of Michigan, 3/19/2018.

39. **First Measurement of Monoenergetic Muon Neutrino Charged Current Interactions**  
Recontres de Moriond Conference, plenary, La Thuile, Italy, 3/15/2018.

40. **Taking a Picture of a Neutrino**  
Society of Physics Students Zone 7 Lecture, University of Michigan, 1/27/2018.
Global Experimental Program for Sterile Neutrino Searches
Korean Physical Society Meeting: Pioneer Symposium, Gyeongju, South Korea, 10/27/2017.

Opportunities with Monoenergetic Neutrinos
Particle Physics Seminar, Virginia Tech, 10/11/2017.

JSNS²: A Sterile Neutrino Search in Japan
APS Division of Particles and Fields (DPF) Meeting, parallel, Fermilab, 8/3/2017.

A Sterile Neutrino Search in Japan Using 50 tons of Liquid Scintillator
American Chemical Society Middle Atlantic Regional Meeting, parallel, Riverdale, NY, 6/10/2016.

Kaon Decay-at-Rest and a Very Unique Neutrino
Particle Physics Seminar, Wayne State University, 4/16/2016.

Photographing the Ghostly Neutrino
Saturday Morning Physics Public Lecture, University of Michigan, 4/9/2016.

The Importance of Neutrinos From Kaon Decay-at-Rest
High Energy Physics Seminar, Indiana University, 4/4/2016.

The Importance of Neutrinos From Kaon Decay-at-Rest
High Energy Physics Division Seminar, Argonne National Lab, 2/3/2016.

A Known-Energy Neutrino and What It Can Teach Us
Physics Department Colloquium, New Mexico State University, 1/21/2016.

Opportunities with Kaon Decay-at-Rest Neutrinos
Neutrino Seminar Series, Fermilab, 10/29/2015.

IsoDAR and DAEδALUS
APS Division of Particles and Fields (DPF) Meeting, parallel, Ann Arbor, MI, 8/4/2015.

Using Kaons to Unlock the Secrets of the Neutrino
High Energy Physics Seminar, Harvard University, 2/26/2015.

Using Kaons to Unlock the Secrets of the Neutrino
High Energy Physics Seminar, University of Michigan, 2/23/2015.

Using Kaons to Unlock the Secrets of the Neutrino
High Energy Physics Seminar, University of California at Irvine, 2/20/2015.

Using Kaons to Unlock the Secrets of the Neutrino
High Energy Physics Seminar, University of Wisconsin at Madison, 2/17/2015.

Using Kaons to Unlock the Secrets of the Neutrino
High Energy Physics Seminar, University of California at San Diego, 2/12/2015.

Using Kaons to Unlock the Secrets of the Neutrino
High Energy Physics Seminar, University of Pennsylvania, 2/10/2015.

Pion/Muon and Kaon Decay-at-rest Experiments
Workshop on the Intermediate Neutrino Program, Brookhaven National Lab, parallel, 2/5/2015.

Using Kaons to Unlock the Secrets of the Neutrino
Center for Particles and Fields Seminar, University of Texas at Austin, 1/26/2015.

Using Kaons to Unlock the Secrets of the Neutrino
Physics Department Colloquium, Iowa State University, 1/20/2015.

The Future of the Sterile Neutrino
Particle Physics Seminar, SUNY Stony Brook, 11/21/2014.

IsoDAR and DAEδALUS
International Workshop on Next Generation Nucleon Decay and Neutrino Detectors (NNN), parallel, Paris, France, 11/4/2014.
63. **Sterile Neutrinos**
   Physics Department Colloquium, Brookhaven National Lab, 9/30/2014.

64. **IsoDAR and DAEδALUS**
   International Workshop on Neutrino Factories (NuFACT), parallel, Glasgow, Scotland, 8/29/2014.

65. **Searches for Sterile Neutrino Mixing**
   International Workshop on Neutrinos from Accelerators (NuFACT), plenary, Glasgow, Scotland, 8/27/2014.

66. **Future Short-baseline Sterile Neutrino Searches with Accelerators**
   International Conference on Neutrino Physics and Astrophysics (NEUTRINO), plenary, Boston, MA, 6/7/2014.

67. **Testing Einstein with Neutrinos**
   Pappalardo Symposium, MIT, 5/16/2014.

68. **Closing in on the Neutrino**
   Physics Department Colloquium, Amherst College, 3/6/2014.

69. **Using Kaons to Unlock the Secrets of the Neutrino**
   Laboratory for Nuclear Science Seminar, MIT, 2/21/2014.

70. **IsoDAR and DAEδALUS**
    ICFA Neutrino European Meeting talk, Paris, France, 1/10/2014.

71. **IsoDAR and the DAEδALUS Program**
    International Workshop on Next Generation Nucleon Decay and Neutrino Detectors (NNN), plenary, Tokyo, Japan, 11/12/2013.

72. **Closing in on the Neutrino**
    Physics Department Colloquium, Williams College, 9/27/2013.

73. **Multiple Probes of Lorentz Violation with Reactor Antineutrinos**
    APS Division of Particles and Fields (DPF) Meeting, parallel, Santa Cruz, CA, 8/16/2013.

74. **Closing in on the Neutrino**
    Physics Department Colloquium, Syracuse University, 4/18/2013.

75. **Kaon Decay-at-rest Sources for Sterile Neutrino Studies**
    Snowmass Workshop on the Intensity Frontier, parallel, Brookhaven National Laboratory, 4/17/2013.

76. **Using Kaons to Probe the Sterile Neutrino**
    Particle/Nuclear Seminar, University of Colorado at Boulder, 4/15/2013.

77. **Kaon Decay at-rest as a Probe of the Sterile Neutrino**
    APS April Meeting 2013, parallel, Denver, CO, 4/14/2013.

78. **Kaons and the Sterile Neutrino**
    Graduate Student Seminar, MIT, 4/5/2013.

79. **Using Kaons to Probe the Sterile Neutrino**
    High Energy Physics Seminar, Tufts University, 3/28/2013.

80. **A New Probe of the Sterile Neutrino**
    High Energy Particle Seminar, Columbia University, 3/27/2013.

81. **A New Way to Probe the Sterile Neutrino: Kaon Decay-at-Rest**
    Aspen Winter Conference: New Directions in Neutrino Physics, plenary, Aspen, CO, 2/5/2013.

82. **Searching for New Physics with Neutrinos**
    Laboratory for Nuclear Science Seminar, MIT, 11/13/2012.
Searching for Lorentz Violation with Reactor Antineutrinos
APS Division of Nuclear Physics (DNP) Meeting, parallel, Newport Beach, CA, 10/27/2012.

Coherent Neutrino Scattering and Sterile Neutrino Searches with a Decay-at-Rest Source
Project X Physics Study WOrkshop talk, Fermilab, 6/20/2012.

Coherent Neutrino Scattering as a Probe of Oscillations
Conference on the Intersections of Particle and Nuclear Physics (CIPANP), parallel, St. Petersburg, FL, 5/31/2012.

The Disappearing Neutrino
Pappalardo Symposium, MIT, 5/18/2012.

Searching for the Sterile Neutrino
Faculty Lunch Seminar, MIT, 5/2/2012.

Probing the Neutrino with Liquid Argon
Laboratory for Nuclear Science Seminar, MIT, 3/20/2012.

ArgoNeuT Physics Results
Joint Experimental-Theoretical Physics Seminar (“Wine and Cheese”), Fermilab, 2/24/2012.

Neutrino Detection with Liquid Argon
Experimental Physics Seminar, Princeton University, 12/15/2011.

Low Energy Neutrino Physics at the Intensity Frontier
Fundamental Physics at the Intensity Frontier, plenary, Rockville, MD, 12/1/2011.

Measuring Muon Neutrino Charged Current Differential Cross Sections on Argon
International Workshop on Next Generation Nucleon Decay and Neutrino Detectors (NNN), plenary, Zurich, Switzerland, 11/8/2011.

The ArgoNeuT Analysis
Neutrino-Nucleus Interactions Conference (NuInt), plenary, Dehradun, India, 3/7/2011.

LArTPCs and Neutrino Detection at Fermilab
Neutrino University Summer School, Fermilab, 8/12/2010.

The ArgoNeuT Experiment
International Conference on High Energy Physics (ICHEP), parallel, Paris, France, 7/24/2010.

ArgoNeuT, a Liquid Argon Time Projection Chamber in a Low Energy Neutrino Beam
Topics in Astroparticle and Underground Physics (TAUP) Conference, parallel, Rome, Italy, 7/2/2009.

ArgoNeuT and MicroBooNE: LArTPCs at Fermilab
Fermilab User’s Meeting 2009, Fermilab, 6/4/2009.

ArgoNeuT: A Physics-Minded Liquid Argon Time Projection Chamber Test Stand
APS April Meeting 2009, parallel, Denver, CO, 5/5/2009.

Physics with ArgoNeuT
Weak Interaction Seminar, Yale University, 3/26/2009.

ArgoNeuT and MicroBooNE: Neutrino Detection with Liquid Argon
Weak Interaction Seminar, Yale University, 5/8/2008.

Neutrino Physics and R&D with ArgoNeuT
APS April Meeting 2008, parallel, St. Louis, MO, 4/14/2008.

Gas Electron Multipliers and Detector Development for Neutrinos and Dark Matter
Weak Interaction Seminar, Yale University, 4/11/2007.
T2K Beam Monte Carlo

103. APS Four Corners Meeting 2005, parallel, Denver, CO, 10/13/2005.

### Classes Taught

- Physics 391: Modern Physics Laboratory (Fall 2019, Winter 2024)
- Physics 150: Fundamental Physics for the Life Sciences I (Fall 2023)
- Physics 116: From Quarks to Cosmos (Fall 2018, Winter 2021)
- Physics 390: Introduction to Modern Physics (Winter 2017, Winter 2018, Winter 2020, Fall 2020)
- Physics 441/442: Advanced Physics Laboratory (Winter 2019, Winter 2022, Winter 2023)
- Physics 360: Honors Physics 3 (Fall 2016, Fall 2017)

### Graduate Students and Postdocs Supervised

- Alexander Takla, PhD student (PhD expected 2029)
- Benjamin Bogart, PhD student (PhD expected 2026)
- Cassandra Little, PhD student (PhD expected 2025)
  - Bissell-Hazen-Kowalczyk Fellowship Awardee (2021)
- Dr. Johnathon Jordan, PhD student (PhD; 4/2022); present position: Senior Data Scientist for the State of Indiana
  - JSNS² Software Development Group Convener (2019-2022)
  - JSNS² KDAR Physics Convener (2019-2022)
  - Rackham Predoctoral Fellowship Awardee (2021)
  - Wirt and Mary Cornwell Prize Awardee (2021)
  - NSF GRFP Awardee (2017)
- Dr. Christopher Barnes, PhD student (PhD; 7/2021); present position: Analytics Associate Manager at Accenture Federal Services
  - MicroBooNE Software Release Manager (2017-2019)
  - DOE SCGSR Fellow (2017-2018)
- Dr. Rory Fitzpatrick, PhD student (PhD; 4/2021); present position: Senior Advisor, Bureau of Economic and Business Affairs, US Department of State
  - Terwilliger Thesis Prize winner (2022)
  - NSF GRFP Honorable Mention (2018)
- Dr. Eric Marzec, postdoc (6/2019-present)
  - JSNS² KDAR Physics Convener (2019-present)
  - JSNS² Michigan Electronics Convener (2019-present)
- Dr. Joel Mousseau, postdoc (11/2015-5/2021); present position: Software Engineer at divvyDOSE
  - SBND X-ARAPUCA Light Collection System Convener (2016-2021)
• MicroBooNE Cross Section Group Convener (2017-2020)
• MicroBooNE Data Management and Production Convener (2016-2018)

• Dr. Eito Iwai, postdoc (7/2016-10/2018); present position: Scientist at RIKEN

Undergraduate and Post-baccalaureate Students Supervised

• Jordan Thomas (REU student; 6/2024-present); present position: works in Spitz group
• Andrew Chan (3/2024-present); present position: works in Spitz group
• Andrew Calabrese-Day (12/2023-present); present position: works in Spitz group
• Kathryn Ream (9/2023-present); present position: works in Spitz group
• Hannah Ross (REU student; 6/2023-8/2023); present position: undergraduate student at Baldwin Wallace University
• Andrea Pellot Jimenez (3/2023-present); present position: works in Spitz group
• Evan Kattapong-Graber (1/2023-present); present position: works in Spitz group
• Elizabeth Kane (REU student; 6/2022-8/2022); present position: PhD student at U. Colorado
• Josh Zhang (5/2022-5/2023); present position: undergraduate student at University of Michigan
• Alexander Antonakis (5/2021-9/2022); present position: PhD student at UCSB
• Alexis Metzler (2/2020-7/2021); present position: works at Deloitte
• Daniel Mishins (4/2019-8/2022); present position: Masters student at University of Michigan
• Miguel Botran (Post-baccalaureate; 9/2019-9/2020); present position: works at Waymo
• Benjamin Bogart (REU student; 6/2020-8/2020); present position: PhD student at University of Michigan in Spitz group
• Dr. Nicholas Kamp (9/2018-8/2019); present position: Postdoc at Harvard University (NSF GRFP)
• Polina Abratenko (9/2016-1/2019); present position: PhD student at Tufts University (NSF GRFP)
• Lilly Bralts-Kelly (REU student; 6/2018-8/2018); present position: works at The Land Connection
• Dr. Claire Savard (2/2016-9/2017); present position: PhD student at University of Colorado Boulder
• William Warner (9/2016-8/2017); present position: PhD student at University of Texas at Austin
• TJ Borucki (4/2016-6/2017); present position: Unknown
• Dr. Efrain Segarra (5/2016-8/2016); present position: PhD student at MIT (NSF GRFP)

Thesis/Prospectus Committees

• Michael Williams, Prospectus Defense Committee member (8/23/2021), PhD Thesis Committee member (5/31/2024)
• Cynthia Nuñez, Prospectus Defense Committee member (8/17/2020), PhD Thesis Committee member (5/30/2024)
• Dillon Fitzgerald, Prospectus Defense Committee member (1/10/2020), PhD Thesis Committee member (12/11/2023)
• Mackenzie Devilbiss, Prospectus Defense Committee member (5/4/2021), PhD Thesis Committee member (11/3/2023)
• Miguel Hernandez, Prospectus Defense Committee member (8/28/2023)
• Chamindu Amarasinghe, PhD Thesis Committee member (7/17/2023)
• Luke Korley, Prospectus Defense Committee member (8/25/2021), PhD Thesis Committee member (1/9/2023)
• Chelsea Hendrus, Prospectus Defense Committee member (10/11/2016), PhD Thesis Committee member (12/13/2022)
• Harvey Birch, Prospectus Defense Committee member (12/1/2022)
• Cassandra Little, Prospectus Defense Committee chair (8/25/2022)
• Chris Dessert, PhD Thesis Committee member (7/21/2022)
• Yongyi Wu, Prospectus Defense Committee member (12/7/2017), PhD Thesis Committee member (7/20/2022)
• Maris Arthurs, Prospectus Defense Committee member (12/7/2017), PhD Thesis Committee member (7/7/2022)
• Johnathon Jordan, Prospectus Defense Committee chair (12/6/2017), PhD Thesis Committee chair (4/14/2022)
• Zhichen Wang, Prospectus Defense Committee member (8/27/2021)
• Joshua Foster, PhD Thesis Committee member (8/17/2021)
• Christopher Barnes, Prospectus Defense Committee chair (5/4/2017), PhD Thesis Committee chair (7/19/2021)
• Rory Fitzpatrick, Prospectus Defense Committee chair (12/6/2017), PhD Thesis Committee chair (4/1/2021)
• Melissa Hutcheson, Prospectus Defense Committee member (4/20/2018), PhD Thesis Committee member (3/17/2021)
• Felicia Sutanto, Prospectus Defense Committee member (12/12/2019), PhD Thesis Committee member (1/29/2021)
• Callum Jones, PhD Thesis Committee member (3/24/2020)
• Rachel Hyneman, PhD Thesis Committee member (1/31/2020)
• Shuzhou Zhang, Prospectus Defense Committee member (5/8/2019)
• Natasha Sachdeva, PhD Thesis Committee member (1/14/2019)
• Joseph Osborn, PhD Thesis Committee member (5/29/2018)
• Ariana Hackenburg (Yale University), External PhD dissertation reader (5/2018)
• Noah Steinberg, Prospectus Defense Committee member (12/15/2017)
Internal Service at U. Michigan

- Physics Department Chair Search Committee member (2024-present)
- Physics Department Undergraduate Research Coordinator (2023-present)
- Instrument Oversight Committee member (2021-present)
- Physics Department Executive Committee member (2022-2024)
- Curriculum/Concerns (Majors and Minors) Committee member (2020-2021, 2021-2022)
- Editorial Advisory Board Committee member (2019-2020, 2020-2021)
- Commencement Marshal (2019-2020)
- Faculty Search Committee member (2018-2019, 2019-2020, 2020-2021, 2021-2022)
- Mentor for Junior Faculty: Brian Beckford (2017-2018, 2018-2019, 2019-2020)
- Undergraduate Major Adviser (2018-2019)
- General Colloquium Committee chair (2018-2019)
- General Colloquium Committee member (2017-2018)
- Graduate Admissions Committee member (2015-2016, 2017-2018)
- HEP and Astrophysics Seminar co-chair (2015-2016, 2016-2017)