

Curriculum Vitae

Dr. Nathaniel James Tagg

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Education

- Ph.D:** University of Guelph, Ontario, Canada, 2001.
(Guelph-Waterloo Program for Graduate Studies in Physics)
Thesis supervisor: J. J. Simpson.
Thesis: "The ^8Li Calibration Source and Through-Going Muons in the Sudbury Neutrino Observatory"
- M.Sc:** University of Guelph, Ontario, Canada. 1996.
(Guelph-Waterloo Program for Graduate Studies in Physics)
- B.Sc:** University of Lethbridge, B.Sc. (Great Distinction) 1993.

Employment

- 2019-present: Professor at Otterbein University
- 2015-2020: Physics Department Chair at Otterbein University
- 2013-2019: Associate Professor of Physics at Otterbein University
- 2008-2013: Assistant Professor of Physics at Otterbein University
- 2005-2008: Visiting Scientist at Tufts University
- 2006-2008: Research Assistant at Brookhaven National Laboratory
- 2001-2005: Postdoctoral research assistant at Oxford University, UK

Grants and Support

- Nathaniel Tagg (PI): "RUI: Neutrino Experiments at Fermilab" 2019-2023. National Science Foundation, program for Research at Undergraduate Institutions. \$196,000 to support research in experimental particle physics, including stipends and travel support for Otterbein students.
- Nathaniel Tagg (PI): "RUI: Neutrino Experiments at Fermilab" (similar to above, \$147,000) 2016-2018
- Nathaniel Tagg (PI): "RUI: Neutrino Experiments at Fermilab" (similar to above, \$137,000) 2013-2015.
- Nathaniel Tagg (PI): Visitor support for extended travel to Fermilab to work on MINERvA project. Roughly \$6800 to support PI and two undergraduate students for one month. Awarded and used June 2011.
- Nathaniel Tagg (PI): "RUI: Neutrino Experiments with the NuMI Beam." (similar to above, \$113,000) 2009-2012.
- National Sciences and Engineering Council Post Graduate Scholarship (NSERC PGS A), 1993-95

Teaching

Introductory Physics (Algebra-based, Phys 121,122,123)

Introductory Physics (Calculus based, with lab) (Phys 1500,1600)

Introductory Physics Laboratory (Phys 141, 143, 1200)

Classical Mechanics I and II (Phys 3000, 305)

Nuclear and Particle Physics (Phys 440, Phys 4901)

Electronics (Phys 350, Phys 3700)

Advanced Physics Laboratory (Phys 320/420, 3500)

Modern Physics and Modern Physics laboratory (Phys 2700)

Optics (PHYS 4000)

Revolutions - relativity and quantum mechanics for general education (INST 240)

Physics for Future Presidents - phenomenological description of politically important physics topics for general education (INST 2404)

The Nature Of Light - optics for general education (INST 2406)

Notable Service to School

- Institutional Effectiveness committee (2020-2022)
- Arts & Sciences school personnel evaluation committee (2017-2019)
- Supervised overhaul of physics curriculum (2016-17) - change from 4-credit-hour model to 3-credit
- Department chair (2015-2020)
- Departmental Senator (2015-present)
- Participated in overhaul of university curriculum (2010-11) - change from quarters to semesters
- Teaching/learning/technology committee (2011-12)
- Personnel/Curriculum hiring subcommittee (2011)
- Curriculum committee (2010-12)
- Institutional effectiveness committee (2009-11)
- Departmental assessment representative (2009-2015)
- Science lecture series committee (2009-2018)
- University senator (2008-2015)
- Advisor to students (2008-present)

Professional Memberships and Service

Referee: Nuclear Instruments and Methods A, American Journal of Physics

Member: American Physical Society, American Association of Physics Teachers

Member: American Association of University Professors

Current Research Affiliations

DUNE Experiment Collaboration (2017-)

MicroBooNE Experiment Collaboration (2014-)

MINER ν A Experiment Collaboration (full author 2008-2015, limited author 2015-onward)

MINOS+ Experiment Collaboration (legacy author, 2001-)

Professional Development

Participant, Partnership for Integration of Computation into Undergraduate Physics (PICUP), 2017-

Member, Otterbein's Center for Teaching and Learning "STEM Professional Learning Community", 2014-15

Member, Otterbein's Center for Teaching and Learning "New Faculty Teaching and Learning Community", 2009-10

AAPT New Faculty Workshop, 2009

Publications

Papers in Refereed Journals

In accordance with the the current Otterbein physics department scholarship statement, publications [1]-[76] are "peer-reviewed artifacts in well-respected journals" with my affiliation listed as Otterbein University or Otterbein College. (Newest first.)

- [1] P. Abratenko et al. "Measurement of differential cross sections for ν_μ -Ar charged-current interactions with protons and no pions in the final state with the MicroBooNE detector". In: *Phys. Rev. D* 102.11 (2020), p. 112013. DOI: 10.1103/PhysRevD.102.112013. arXiv: 2010.02390 [hep-ex].
- [2] P. Abratenko et al. "Measurement of space charge effects in the MicroBooNE LArTPC using cosmic muons". In: *JINST* 15.12 (2020), P12037. DOI: 10.1088/1748-0221/15/12/P12037. arXiv: 2008.09765 [physics.ins-det].
- [3] P. Adamson et al. "Precision Constraints for Three-Flavor Neutrino Oscillations from the Full MINOS+ and MINOS Dataset". In: *Phys. Rev. Lett.* 125.13 (2020), p. 131802. DOI: 10.1103/PhysRevLett.125.131802. arXiv: 2006.15208 [hep-ex].
- [4] P. Abratenko et al. "First Measurement of Differential Charged Current Quasielastic-like ν_μ -Argon Scattering Cross Sections with the MicroBooNE Detector". In: *Phys. Rev. Lett.* 125.20 (2020), p. 201803. DOI: 10.1103/PhysRevLett.125.201803. arXiv: 2006.00108 [hep-ex].
- [5] P. Adamson et al. "Improved Constraints on Sterile Neutrino Mixing from Disappearance Searches in the MINOS, MINOS+, Daya Bay, and Bugey-3 Experiments". In: *Phys. Rev. Lett.* 125.7 (2020), p. 071801. DOI: 10.1103/PhysRevLett.125.071801. arXiv: 2002.00301 [hep-ex].
- [6] P. Abratenko et al. "Search for Heavy Neutral Leptons Decaying into Muon-Pion Pairs in the MicroBooNE Detector". In: *Phys. Rev. D* 101.5 (2020), p. 052001. DOI: 10.1103/PhysRevD.101.052001. arXiv: 1911.10545 [hep-ex].
- [7] C. Adams et al. "Reconstruction and Measurement of $\mathcal{O}(100)$ MeV Energy Electromagnetic Activity from $\pi^0 \rightarrow \gamma\gamma$ Decays in the MicroBooNE LArTPC". In: *JINST* 15.02 (2020), P02007. DOI: 10.1088/1748-0221/15/02/P02007. arXiv: 1910.02166 [hep-ex].
- [8] C. Adams et al. "A method to determine the electric field of liquid argon time projection chambers using a UV laser system and its application in MicroBooNE". In: *JINST* 15.07 (2020), P07010. DOI: 10.1088/1748-0221/15/07/P07010. arXiv: 1910.01430 [physics.ins-det].
- [9] C. Adams et al. "Calibration of the charge and energy loss per unit length of the MicroBooNE liquid argon time projection chamber using muons and protons". In: *JINST* 15.03 (2020), P03022. DOI: 10.1088/1748-0221/15/03/P03022. arXiv: 1907.11736 [physics.ins-det].

- [10] P. Abratenko et al. "First Measurement of Inclusive Muon Neutrino Charged Current Differential Cross Sections on Argon at $E_\nu \sim 0.8$ GeV with the MicroBooNE Detector". In: *Phys. Rev. Lett.* 123.13 (2019), p. 131801. DOI: 10.1103/PhysRevLett.123.131801. arXiv: 1905.09694 [hep-ex].
- [11] C. Adams et al. "Design and construction of the MicroBooNE Cosmic Ray Tagger system". In: *JINST* 14.04 (2019), P04004. DOI: 10.1088/1748-0221/14/04/P04004. arXiv: 1901.02862 [physics.ins-det].
- [12] C. Adams et al. "Rejecting cosmic background for exclusive charged current quasi elastic neutrino interaction studies with Liquid Argon TPCs; a case study with the MicroBooNE detector". In: *Eur. Phys. J. C* 79.8 (2019), p. 673. DOI: 10.1140/epjc/s10052-019-7184-7. arXiv: 1812.05679 [physics.ins-det].
- [13] C. Adams et al. "First measurement of ν_μ charged-current π^0 production on argon with the MicroBooNE detector". In: *Phys. Rev. D* 99.9 (2019), p. 091102. DOI: 10.1103/PhysRevD.99.091102. arXiv: 1811.02700 [hep-ex].
- [14] C. Adams et al. "Deep neural network for pixel-level electromagnetic particle identification in the MicroBooNE liquid argon time projection chamber". In: *Phys. Rev. D* 99.9 (2019), p. 092001. DOI: 10.1103/PhysRevD.99.092001. arXiv: 1808.07269 [hep-ex].
- [15] C. Adams et al. "Comparison of ν_μ -Ar multiplicity distributions observed by MicroBooNE to GENIE model predictions". In: *Eur. Phys. J. C* 79.3 (2019), p. 248. DOI: 10.1140/epjc/s10052-019-6742-3. arXiv: 1805.06887 [hep-ex].
- [16] C. Adams et al. "Ionization electron signal processing in single phase LArTPCs. Part II. Data/simulation comparison and performance in MicroBooNE". In: *JINST* 13.07 (2018), P07007. DOI: 10.1088/1748-0221/13/07/P07007. arXiv: 1804.02583 [physics.ins-det].
- [17] C. Adams et al. "Ionization electron signal processing in single phase LArTPCs. Part I. Algorithm Description and quantitative evaluation with MicroBooNE simulation". In: *JINST* 13.07 (2018), P07006. DOI: 10.1088/1748-0221/13/07/P07006. arXiv: 1802.08709 [physics.ins-det].
- [18] A. Mislivec et al. "Measurement of total and differential cross sections of neutrino and antineutrino coherent π^\pm production on carbon". In: *Phys. Rev. D* 97.3 (2018), p. 032014. DOI: 10.1103/PhysRevD.97.032014. arXiv: 1711.01178 [hep-ex].
- [19] P. Adamson et al. "Search for sterile neutrinos in MINOS and MINOS+ using a two-detector fit". In: *Phys. Rev. Lett.* 122.9 (2019), p. 091803. DOI: 10.1103/PhysRevLett.122.091803. arXiv: 1710.06488 [hep-ex].
- [20] R. Acciarri et al. "The Pandora multi-algorithm approach to automated pattern recognition of cosmic-ray muon and neutrino events in the MicroBooNE detector". In: *Eur. Phys. J. C* 78.1 (2018), p. 82. DOI: 10.1140/epjc/s10052-017-5481-6. arXiv: 1708.03135 [hep-ex].
- [21] R. Acciarri et al. "Measurement of cosmic-ray reconstruction efficiencies in the MicroBooNE LArTPC using a small external cosmic-ray counter". In: *JINST* 12.12 (2017), P12030. DOI: 10.1088/1748-0221/12/12/P12030. arXiv: 1707.09903 [hep-ex].
- [22] R. Acciarri et al. "Noise Characterization and Filtering in the MicroBooNE Liquid Argon TPC". In: *JINST* 12.08 (2017), P08003. DOI: 10.1088/1748-0221/12/08/P08003. arXiv: 1705.07341 [physics.ins-det].
- [23] R. Acciarri et al. "Michel Electron Reconstruction Using Cosmic-Ray Data from the MicroBooNE LArTPC". In: *JINST* 12.09 (2017), P09014. DOI: 10.1088/1748-0221/12/09/P09014. arXiv: 1704.02927 [physics.ins-det].
- [24] P. Abratenko et al. "Determination of muon momentum in the MicroBooNE LArTPC using an improved model of multiple Coulomb scattering". In: *JINST* 12.10 (2017), P10010. DOI: 10.1088/1748-0221/12/10/P10010. arXiv: 1703.06187 [physics.ins-det].
- [25] R. Acciarri et al. "Design and Construction of the MicroBooNE Detector". In: *JINST* 12.02 (2017), P02017. DOI: 10.1088/1748-0221/12/02/P02017. arXiv: 1612.05824 [physics.ins-det].
- [26] R. Acciarri et al. "Convolutional Neural Networks Applied to Neutrino Events in a Liquid Argon Time Projection Chamber". In: *JINST* 12.03 (2017), P03011. DOI: 10.1088/1748-0221/12/03/P03011. arXiv: 1611.05531 [physics.ins-det].
- [27] P. Adamson et al. "Constraints on Large Extra Dimensions from the MINOS Experiment". In: *Phys. Rev. D* 94.11 (2016), p. 111101. DOI: 10.1103/PhysRevD.94.111101. arXiv: 1608.06964 [hep-ex].

- [28] P. Adamson et al. "Measurement of single π^0 production by coherent neutral-current ν Fe interactions in the MINOS Near Detector". In: *Phys. Rev. D* 94.7 (2016), p. 072006. DOI: 10.1103/PhysRevD.94.072006. arXiv: 1608.05702 [hep-ex].
- [29] P. Adamson et al. "Limits on Active to Sterile Neutrino Oscillations from Disappearance Searches in the MINOS, Daya Bay, and Bugey-3 Experiments". In: *Phys. Rev. Lett.* 117.15 (2016). [Addendum: *Phys.Rev.Lett.* 117, 209901 (2016)], p. 151801. DOI: 10.1103/PhysRevLett.117.151801. arXiv: 1607.01177 [hep-ex].
- [30] P. Adamson et al. "Search for Sterile Neutrinos Mixing with Muon Neutrinos in MINOS". In: *Phys. Rev. Lett.* 117.15 (2016), p. 151803. DOI: 10.1103/PhysRevLett.117.151803. arXiv: 1607.01176 [hep-ex].
- [31] P. Adamson et al. "Search for flavor-changing nonstandard neutrino interactions using ν_e appearance in MINOS". In: *Phys. Rev. D* 95.1 (2017), p. 012005. DOI: 10.1103/PhysRevD.95.012005. arXiv: 1605.06169 [hep-ex].
- [32] J. Wolcott et al. "Evidence for Neutral-Current Diffractive π^0 Production from Hydrogen in Neutrino Interactions on Hydrocarbon". In: *Phys. Rev. Lett.* 117.11 (2016), p. 111801. DOI: 10.1103/PhysRevLett.117.111801. arXiv: 1604.01728 [hep-ex].
- [33] P. Adamson et al. "Measurement of the Multiple-Muon Charge Ratio in the MINOS Far Detector". In: *Phys. Rev. D* 93.5 (2016), p. 052017. DOI: 10.1103/PhysRevD.93.052017. arXiv: 1602.00783 [hep-ex].
- [34] J. Mousseau et al. "Measurement of Partonic Nuclear Effects in Deep-Inelastic Neutrino Scattering using MINERvA". In: *Phys. Rev. D* 93.7 (2016), p. 071101. DOI: 10.1103/PhysRevD.93.071101. arXiv: 1601.06313 [hep-ex].
- [35] J. Park et al. "Measurement of Neutrino Flux from Neutrino-Electron Elastic Scattering". In: *Phys. Rev. D* 93.11 (2016), p. 112007. DOI: 10.1103/PhysRevD.93.112007. arXiv: 1512.07699 [physics.ins-det].
- [36] P. A. Rodrigues et al. "Identification of nuclear effects in neutrino-carbon interactions at low three-momentum transfer". In: *Phys. Rev. Lett.* 116 (2016). [Addendum: *Phys.Rev.Lett.* 121, 209902 (2018)], p. 071802. DOI: 10.1103/PhysRevLett.116.071802. arXiv: 1511.05944 [hep-ex].
- [37] J. Wolcott et al. "Measurement of electron neutrino quasielastic and quasielasticlike scattering on hydrocarbon at $\langle E_\nu \rangle = 3.6$ GeV". In: *Phys. Rev. Lett.* 116.8 (2016), p. 081802. DOI: 10.1103/PhysRevLett.116.081802. arXiv: 1509.05729 [hep-ex].
- [38] F. P. An et al. "The Detector System of The Daya Bay Reactor Neutrino Experiment". In: *Nucl. Instrum. Meth. A* 811 (2016), pp. 133–161. DOI: 10.1016/j.nima.2015.11.144. arXiv: 1508.03943 [physics.ins-det].
- [39] P. Adamson et al. "The NuMI Neutrino Beam". In: *Nucl. Instrum. Meth. A* 806 (2016), pp. 279–306. DOI: 10.1016/j.nima.2015.08.063. arXiv: 1507.06690 [physics.acc-ph].
- [40] P. Adamson et al. "Precision Measurement of the Speed of Propagation of Neutrinos using the MINOS Detectors". In: *Phys. Rev. D* 92.5 (2015), p. 052005. DOI: 10.1103/PhysRevD.92.052005. arXiv: 1507.04328 [hep-ex].
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- [42] T. Le et al. "Single Neutral Pion Production by Charged-Current $\bar{\nu}_\mu$ Interactions on Hydrocarbon at $\langle E_\nu \rangle = 3.6$ GeV". In: *Phys. Lett. B* 749 (2015), pp. 130–136. DOI: 10.1016/j.physletb.2015.07.039. arXiv: 1503.02107 [hep-ex].
- [43] L. Aliaga et al. "MINERvA neutrino detector response measured with test beam data". In: *Nucl. Instrum. Meth. A* 789 (2015), pp. 28–42. DOI: 10.1016/j.nima.2015.04.003. arXiv: 1501.06431 [physics.ins-det].
- [44] P. Adamson et al. "Study of quasielastic scattering using charged-current ν_μ -iron interactions in the MINOS near detector". In: *Phys. Rev. D* 91.1 (2015), p. 012005. DOI: 10.1103/PhysRevD.91.012005. arXiv: 1410.8613 [hep-ex].
- [45] T. Walton et al. "Measurement of muon plus proton final states in ν_μ interactions on hydrocarbon at $\langle E_\nu \rangle = 4.2$ GeV". In: *Phys. Rev. D* 91.7 (2015), p. 071301. DOI: 10.1103/PhysRevD.91.071301. arXiv: 1409.4497 [hep-ex].

- [46] A. Higuera et al. "Measurement of Coherent Production of π^\pm in Neutrino and Antineutrino Beams on Carbon from E_ν of 1.5 to 20 GeV". In: *Phys. Rev. Lett.* 113.26 (2014), p. 261802. DOI: 10.1103/PhysRevLett.113.261802. arXiv: 1409.3835 [hep-ex].
- [47] P. Adamson et al. "Observation of Muon Intensity Variations by Season with the MINOS Near Detector". In: *Phys. Rev. D* 90.1 (2014), p. 012010. DOI: 10.1103/PhysRevD.90.012010. arXiv: 1406.7019 [hep-ex].
- [48] B. Eberly et al. "Charged Pion Production in ν_μ Interactions on Hydrocarbon at $\langle E_\nu \rangle = 4.0$ GeV". In: *Phys. Rev. D* 92.9 (2015), p. 092008. DOI: 10.1103/PhysRevD.92.092008. arXiv: 1406.6415 [hep-ex].
- [49] B. G. Tice et al. "Measurement of Ratios of ν_μ Charged-Current Cross Sections on C, Fe, and Pb to CH at Neutrino Energies 2-20 GeV". In: *Phys. Rev. Lett.* 112.23 (2014), p. 231801. DOI: 10.1103/PhysRevLett.112.231801. arXiv: 1403.2103 [hep-ex].
- [50] P. Adamson et al. "Combined analysis of ν_μ disappearance and $\nu_\mu \rightarrow \nu_e$ appearance in MINOS using accelerator and atmospheric neutrinos". In: *Phys. Rev. Lett.* 112 (2014), p. 191801. DOI: 10.1103/PhysRevLett.112.191801. arXiv: 1403.0867 [hep-ex].
- [51] L. Aliaga et al. "Design, Calibration, and Performance of the MINERvA Detector". In: *Nucl. Instrum. Meth. A* 743 (2014), pp. 130–159. DOI: 10.1016/j.nima.2013.12.053. arXiv: 1305.5199 [physics.ins-det].
- [52] G. A. Fiorentini et al. "Measurement of Muon Neutrino Quasielastic Scattering on a Hydrocarbon Target at $E_\nu \sim 3.5$ GeV". In: *Phys. Rev. Lett.* 111 (2013), p. 022502. DOI: 10.1103/PhysRevLett.111.022502. arXiv: 1305.2243 [hep-ex].
- [53] L. Fields et al. "Measurement of Muon Antineutrino Quasielastic Scattering on a Hydrocarbon Target at $E_\nu \sim 3.5$ GeV". In: *Phys. Rev. Lett.* 111.2 (2013), p. 022501. DOI: 10.1103/PhysRevLett.111.022501. arXiv: 1305.2234 [hep-ex].
- [54] P. Adamson et al. "Measurement of Neutrino and Antineutrino Oscillations Using Beam and Atmospheric Data in MINOS". In: *Phys. Rev. Lett.* 110.25 (2013), p. 251801. DOI: 10.1103/PhysRevLett.110.251801. arXiv: 1304.6335 [hep-ex].
- [55] P. Adamson et al. "Search for flavor-changing non-standard neutrino interactions by MINOS". In: *Phys. Rev. D* 88.7 (2013), p. 072011. DOI: 10.1103/PhysRevD.88.072011. arXiv: 1303.5314 [hep-ex].
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- [60] D. D. Stancil et al. "Demonstration of Communication using Neutrinos". In: *Mod. Phys. Lett. A* 27 (2012), p. 1250077. DOI: 10.1142/S0217732312500770. arXiv: 1203.2847 [hep-ex].
- [61] P. Adamson et al. "An improved measurement of muon antineutrino disappearance in MINOS". In: *Phys. Rev. Lett.* 108 (2012), p. 191801. DOI: 10.1103/PhysRevLett.108.191801. arXiv: 1202.2772 [hep-ex].
- [62] P. Adamson et al. "Search for Lorentz invariance and CPT violation with muon antineutrinos in the MINOS Near Detector". In: *Phys. Rev. D* 85 (2012), p. 031101. DOI: 10.1103/PhysRevD.85.031101. arXiv: 1201.2631 [hep-ex].
- [63] N. Tagg et al. "Arachne - A web-based event viewer for MINERvA". In: *Nucl. Instrum. Meth. A* 676 (2012), pp. 44–49. DOI: 10.1016/j.nima.2012.01.059. arXiv: 1111.5315 [hep-ex].
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- [65] P. Adamson et al. "Improved search for muon-neutrino to electron-neutrino oscillations in MINOS". In: *Phys. Rev. Lett.* 107 (2011), p. 181802. DOI: 10.1103/PhysRevLett.107.181802. arXiv: 1108.0015 [hep-ex].

- [66] P. Adamson et al. "Active to sterile neutrino mixing limits from neutral-current interactions in MINOS". In: *Phys. Rev. Lett.* 107 (2011), p. 011802. DOI: 10.1103/PhysRevLett.107.011802. arXiv: 1104.3922 [hep-ex].
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- [68] P. Adamson et al. "Measurement of the Neutrino Mass Splitting and Flavor Mixing by MINOS". In: *Phys. Rev. Lett.* 106 (2011), p. 181801. DOI: 10.1103/PhysRevLett.106.181801. arXiv: 1103.0340 [hep-ex].
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- [76] P. Adamson et al. "Observation of muon intensity variations by season with the MINOS far detector". In: *Phys. Rev. D* 81 (2010), p. 012001. DOI: 10.1103/PhysRevD.81.012001. arXiv: 0909.4012 [hep-ex].
- [77] B. Aharmim et al. "Measurement of the Cosmic Ray and Neutrino-Induced Muon Flux at the Sudbury Neutrino Observatory". In: *Phys. Rev. D* 80 (2009), p. 012001. DOI: 10.1103/PhysRevD.80.012001. arXiv: 0902.2776 [hep-ex].
- [78] A. Cabrera et al. "Comparisons of the MINOS Near and Far Detector Readout Systems at a Test Beam". In: *Nucl. Instrum. Meth. A* 609 (2009), pp. 106–113. DOI: 10.1016/j.nima.2009.07.016. arXiv: 0902.1116 [physics.ins-det].
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Conferences and Proceedings

1. **“Results from the First year of Beam with MINOS”**
N. Tagg [MINOS Collaboration]
Aspen Winter Conference on Neutrinos in Physics and Astrophysics, Aspen, Jan., 2007
2. **“First MINOS results from the NuMI beam”**
N. Tagg [MINOS Collaboration] [arXiv:hep-ex/0605058]
(First conference presentation of MINOS results.)
In the Proceedings of 4th Flavor Physics and CP Violation Conference (FPCP 2006), Vancouver, British Columbia, Canada, 9-12 Apr 2006
3. **“The MINOS experiment”**
N. Tagg [MINOS Collaboration]

Prepared for 2nd International Workshop on Neutrino Oscillations in Venice (NO-VE 2003), Venice, Italy, 3-5 Dec 2003

4. “ ‘High Energy’ Physics in the Sudbury Neutrino Observatory”

N. Tagg [SNO Collaboration]

10th International School of Particles and Cosmology, Baksan Valley, Kabardino-Balkaria, Russia, April 1999.

Posters

1. **Arachne: An Web-Based Event Display For Education And Outreach,**

N. Tagg for the MINERvA Collaboration,
Neutrino 2012, Kyoto, Japan, June 2012

2. **“Through-Going Muons in the Sudbury Neutrino Observatory”**

N. Tagg and C. Waltham [SNO Collaboration]

Canadian Association Of Physicists Congress, Waterloo, June 1998.

Invited Talks and Seminars

- **“Faster Than Light Neutrinos?”**, Graduate seminar, University of Indiana, Nov, 2012.
- **“The Ghost Particles: Experimental Neutrino Physics”**, Junior Faculty Colloquium Series, Otterbein University, Apr, 2010.
- **“Daya Bay Software Tutorial”**, Various teachers, IHEP Beijing, Dec, 2007.
- **“The MINOS Experiment”**, Seminar at University of Wisconsin at Madison, April, 2007.
- **“Neutrino Oscillations and the MINOS Results”**, Colloquium at Ohio University, Jan., 2007.
- **“Calibrating the ‘Identical’ MINOS Detectors”**, Seminar at Argonne National Lab, Dec 2006.
- **“Neutrino Oscillations and the MINOS Results”**, Colloquium at Brandeis University, Sept 2006.
- **“First MINOS Results from the NuMI Beam”**, Henderson DUESEL Capstone workshop, Stony Brook, May 2006.
- **“First MINOS Results from the NuMI Beam”**, Seminars at Tufts University and the University of British Columbia, April 2006.
- **“First MINOS results from the NuMI beam”**, Flavor Physics and CP Violation Conference (FPCP 2006), Vancouver, British Columbia, Apr 2006
- **“Muons Through SNO”**, Seminar, University of Sheffield, November 2001.
- **“Muons Through SNO”**, Seminar, Oxford University, May 2001
- **“The Sudbury Neutrino Observatory”**, University of Lethbridge, December 1999.