

# Thanh Nguyen

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## CONTACT INFORMATION

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## EDUCATION

**Massachusetts Institute of Technology**, Cambridge, MA, USA

*Ph.D., Nuclear Science and Engineering* (GPA: 4.9/5.0)

**Sep 2018 – present**

**McGill University**, Montréal, QC, Canada

*B.Sc., Physics* (GPA: 3.97/4.00)

**Sep 2015 – May 2018**

First Class Honours and Dean's Honour List

## RESEARCH EXPERIENCE

**Quantum Measurement Group**, Massachusetts Institute of Technology, Cambridge, MA

*Graduate research assistant (supervised by Dr. Mingda Li)*

**May 2018 – present**

- Investigating thermal/electrical transport properties and probing for electronic, magnetic and lattice excitations in synthesized topological materials by performing x-ray and neutron spectroscopy and quantum transport measurements in bulk samples and nano-devices.

**Brunner Neutrino Lab**, McGill University, Montréal, QC

*Undergraduate research assistant (supervised by Dr. Thomas Brunner)*

**May 2017 – Aug 2018**

- Designed and assembled an electroluminescent light source with gas-handling system for detailed characterization of next-generation silicon photomultipliers for application in the future nEXO experiment probing for neutrinoless double beta decay in liquid  $^{136}\text{Xe}$ .

## PUBLICATIONS

1. N. Andrejevic<sup>†</sup>, Z. Chen<sup>†</sup> *et al.*, **Appl. Phys. Rev.** **9**, 011421 (2022). [[link](#)]
2. Z. Chen<sup>†</sup>, X. Shen<sup>†</sup> *et al.*, **arXiv:2202.06199** (2022). [[link](#)]
3. T. Nguyen<sup>†</sup> and M. Li, **J. Appl. Phys.** **131**, 060901 (2022). [[link](#)]
4. T. Nguyen<sup>†</sup>, Y. Tsurimaki<sup>†</sup>, R. Pablo-Pedro<sup>†</sup>, G. Bednik<sup>†</sup> *et al.*, **New J. Phys.** **24**, 013016 (2022). [[link](#)]
5. T. Nguyen<sup>†</sup> *et al.*, **Nano Lett.** **21**, 7419–7425 (2021). [[link](#)]
6. Z. Chen<sup>†</sup>, N. Andrejevic<sup>†</sup> *et al.*, **Chem. Phys. Rev.** **2**, 031301 (2021). [[link](#)]
7. N. C. Drucker<sup>†</sup>, T. Nguyen<sup>†</sup>, F. Han<sup>†</sup>, X. Luo<sup>†</sup> *et al.*, **arXiv:2103.08489** (2021). [[link](#)]
8. F. Han<sup>†</sup>, N. Andrejevic<sup>†</sup>, T. Nguyen<sup>†</sup>, V. Kozii<sup>†</sup> *et al.*, **Nat. Commun.** **11**, 6167 (2020). [[link](#)]
9. T. Nguyen<sup>†</sup>, F. Han<sup>†</sup>, N. Andrejevic<sup>†</sup>, R. Pablo-Pedro<sup>†</sup> *et al.*, **Phys. Rev. Lett.** **124**, 236401 (2020). [[link](#)]
10. N. Andrejevic<sup>†</sup>, F. Han<sup>†</sup> *et al.*, **arXiv:1908.05648** (2019). [[link](#)]
11. nEXO Collaboration *et al.*, **arXiv:1805.11142** (2018) [[link](#)]

## AWARDS

- 2021 MathWorks Engineering Fellowship
- 2021 MIT NSE Manson Benedict Award
- 2019 Sow-Hsin Chen Fellowship in Neutron Science
- 2018 School of Engineering SMA Graduate Fellowship
- 2018 Robert E. Bell Prize in Physics
- 2015-2018 Bourses Hydro-Quebec Science
- 2016-2018 4 x Tomlinson Engagement Award for Mentoring (TEAM)
- 2015-2018 3 x Dean's Honour List for Science
- 2017 Canadian Institute of Nuclear Physics (CINP) Travel Grant
- 2017 Member of the Golden Key International Honour Society
- 2017 Anne Molson Scholarship
- 2017 Women Associates of McGill Scholarship
- 2017 NSERC USRA Science Award
- 2016 E. R. Pounder Prize in Physics

## SKILLS

**Programming:** MATLAB, Python, C, C++, LabVIEW

**Software:** Mathematica, Solidworks, SQL, LaTeX

**Skills:** PPMS (Resistivity, ETO, TTO, Heat capacity), SQUID magnetometry, XRD, SEM, FIB, X-ray scattering, Neutron scattering, Nano-fabrication

**Languages:** English, French, German, Russian, Vietnamese, Chinese, Arabic

TEACHING  
EXPERIENCE

**Introduction to Applied Nuclear Physics (22.02)**

*MIT*

**Radiation Interactions, Control, and Measurement (22.12)**

*Graduate teaching assistant (under Profs. Mingda Li and Ju Li)*

**Jan 2020 – May 2021**

**Calculus A (MATH 150)**

*McGill University*

**Calculus B (MATH 151)**

**Honours Complex Variables (MATH 151)**

**Linear Algebra and Partial Differential Equations (MATH 271)**

**Advanced Calculus (MATH 314)**

*Undergraduate teaching assistant (under Prof. Charles Roth)*

**Jan 2016 – Aug 2018**

**Advanced Calculus (MATH 314)**

*McGill University*

*Undergraduate teaching assistant (under Prof. Stephen Drury)*

**Jan 2017 – Dec 2017**