

## Education

August 2014—  
Current

**Degree:** Doctor of Philosophy in Physics  
**Where:** University of Minnesota, Twin Cities, MN  
**GPA:** 3.6 of 4.0  
Theoretical High Energy Physics

August 2010—  
May 2014

**Degree:** Bachelor of Arts in Physics  
**Where:** Macalester College, Saint Paul, MN  
**GPA:** 3.9 of 4.0  
Magna cum laude  
Majors in Mathematics and Physics

## Research Interests

Beyond Standard Model, Extra Dimension Models, Composite Models, Axion and Strong CP Problem, AdS/CFT Correspondence

## Publications

*Under preparation*

- Peter Cox, Tony Gherghetta, and Minh D. Nguyen. “Neutrino Flavour Oscillation from Warped Axion”. In: *Journal of High Energy Physics (under preparation)* (2021)
- Tony Gherghetta and Minh D. Nguyen. “Collider Signatures of Heavy Composite Axions”. In: *Journal of High Energy Physics (under preparation)* (2021)

*Submitted*

- Quentin Bonnefoy et al. “Flavoured Warped Axion”. In: *Journal of High Energy Physics (under review)* (Dec. 2020). arXiv: 2012.09728

*Published*

- Tony Gherghetta and Minh D. Nguyen. “A composite Higgs with a heavy composite axion”. In: *Journal of High Energy Physics* 2020.12 (Dec. 2020), p. 94. ISSN: 1029-8479. DOI: 10.1007/JHEP12(2020)094. arXiv: 2007.10875
- Peter Cox, Tony Gherghetta, and Minh D. Nguyen. “A holographic perspective on the axion quality problem”. In: *Journal of High Energy Physics* 2020.1 (Jan. 2020), p. 188. ISSN: 1029-8479. DOI: 10.1007/JHEP01(2020)188. arXiv: 1911.09385
- Tony Gherghetta, Minh Nguyen, and Zachary Thomas. “Neutral naturalness with bifundamental gluinos”. In: *Physical Review D* 94.11 (Dec. 2016), p. 115008. ISSN: 2470-0010. DOI: 10.1103/PhysRevD.94.115008. arXiv: 1610.00342
- J. N. Heyman et al. “Ultrafast terahertz Faraday rotation in graphene”. In: *Journal of Applied Physics* 116.21 (Dec. 2014), p. 214302. ISSN: 0021-8979. DOI: 10.1063/1.4903212
- Minh Nguyen. “Meson Spectrum by Holography”. In: *Macalester Journal of Physics and Astronomy* 2.1 (2014), p. 9. ISSN: 2332-7669

- J. N. Heyman et al. “Terahertz and infrared transmission of an organic/inorganic hybrid thermoelectric material”. In: *Applied Physics Letters* 104.14 (Apr. 2014), p. 141912. ISSN: 0003-6951. DOI: 10.1063/1.4871316

### Teaching and Mentoring

*August 2015—*

**Position:** Teaching Assistant

*Current*

**Where:** Department of Physics and Astronomy, University of Minnesota

*January 2012—*

**Position:** Undergraduate teaching assistant

*May 2014*

**Where:** Department of Physics and Astronomy, Macalester College

### Technical expertise

TensorFlow/Keras, Linux shell, Python, L<sup>A</sup>T<sub>E</sub>X, C/C++, R, MatLab

### Honors and awards

- University of Minnesota Fellowship (2014)
- Phi Beta Kappa (2014)
- Kofi Anna Scholarship - Macalester College (2010)
- Gold Medal - International Physics Olympiad (2008)
- Silver Medal - Asian Physics Olympiad (2008)