

# Dang Pham (Phạm Cao Đăng)

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## EDUCATION

UNIVERSITY OF TORONTO 08/2020 - Present  
PhD in Astronomy and Astrophysics.  
Advisor: Professor Hanno Rein.

CORNELL UNIVERSITY, College of Arts and Sciences 08/2016 - 05/2020  
Bachelor of Arts. Majors: Physics, Mathematics. Minors: Astronomy, Archaeology.  
Senior thesis: Bounded cosmic string backreaction and connecting Green's functions for the wave equation.

## PUBLICATIONS

5. **D. Pham**, L. Kaltenegger; "Follow the Water: Photometry using Machine Learning and Bayesian Inference", *submitted to MNRAS*.
4. M. Schlecker, **D. Pham**, R. Burn, Y. Alibert, C. Mordasini, A. Emsenhuber H. Klahr, Th. Henning, L. Mishra; "The Determinism of Global Planet Formation Models", 2021, *A&A*, 656, A73.
3. **D. Pham**, L. Kaltenegger; "Color Classification of Earth-like Planets with Machine Learning", 2021, *MNRAS*, 504, 6106.
2. A. Harding, R. Di Stefano, S. Lépine, J. Urama, **D. Pham**, C. Baker; "Predicting Gravitational Lensing by Stellar Remnants", 2018, *MNRAS*, 475, 79.
1. E. S. Chen, H. Keith, T. Lim, **D. Pham**, R. Rosenthal, C. Herder, S. Pai, R. A. Flores, E. C. M. Chen; "Hylleraas hydride binding energy: diatomic electron affinities", 2015, *Journal of Molecular Modeling*, 21, 79.

## AWARDS AND HONORS

Frank S. Hogg Memorial Fellowship. 2021 -  
David A. Dunlap Department of Astronomy & Astrophysics Entrance Award. 2020 -  
Faculty Of Arts And Science Alumni & Friends Graduate Scholarships. 2020 -  
Summer Research Internship. Max-Planck Institute for Astronomy. 2019  
Dean's List. College of Arts and Sciences, Cornell University. 2018, 2019  
Best Use of the Google Cloud Platform Award. BrickHack 4 (Hackathon). 2018  
First place. 2017 Cornell Mathematical Contest in Modeling. 2017

## EMPLOYMENT

Research Associate at the Department of Astronomy, Cornell University. 08/2020 - 12/2020  
Research Intern at the Max-Planck Institute for Astronomy (MPIA). 05/2019 - 08/2019  
Resident Advisor at the Holland International Living Center. 08/2017 - 05/2020

## TEACHING EXPERIENCE

AST 251: Life on Other Worlds. 2022  
AST 320: Introduction to Astrophysics. 2022  
AST 101: Our place in the Universe. 2021  
AST 201: Stars and Galaxies. 2021

## LEADERSHIP, SERVICE AND OUTREACH

- Undergraduate - Graduate Students Mentor. 2021 -
- Mentor two undergraduate students at the University of Toronto, advising on graduate school admissions and research.
- AstroTours. Photographer & social media director. 2021 -
- Monthly organization of AstroTours, a public outreach program to communicate astronomy research. Manage social media presence for the organization.
- Graduate Astronomy Students Association. 2020 -
- Course and Qualifying Exams committee, AstroTours executive committee, Mentorship committee.
- Cornell Astronomical Society. 2016 - 2020
- Weekly outreach events, include opening Fuertes Observatory for visitors. Operated telescopes including a 100 years old, 12 inches Brashear refractor.
- Cornell Society of Physics Students. President, Secretary, Webmaster. 2016 - 2020
- Participated in weekly outreach events, such as Sagan Walk or Expand Your Horizons (EYH). As president, managed an annual budget of \$5000, increased the club's funding by \$1000; initiated events to increase first-year students participation in introductory Physics classes; led efforts to foster diversity and inclusion in the Physics major.
- Peer Mentor with the Cornell University Department of Physics. 2019

## TECHNICAL SKILLS

Programming languages (scientific computing): Python, Mathematica, Julia, C++ and Rust.  
HPC cluster: SLURM – used the DRACO computing cluster (Garching, Germany).  
Languages: Vietnamese and English. Fluent.