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Dang Pham (Phạm Cao Đăng)

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Education

University of Toronto, Department of Astronomy & Astrophysics — 08/2020 -
PhD in 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.
Advisor: Professor David Chernoff.

Publications

5. **D. Pham**, L. Kaltenegger; "Follow the water: finding water, snow, and clouds on terrestrial exoplanets with photometry and machine learning", 2022, *MNRAS Letters*, 513, L72.
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

International Graduate Student Fellowship for Excellence in Doctoral Studies. 2022
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 Fellowship. Max-Planck-Institut für Astronomie. 2019
Dean's List. College of Arts and Sciences, Cornell University. 2018, 2019
First place. 2017 Cornell Mathematical Contest in Modeling. 2017

Employment

Teaching Assistant. University of Toronto. 09/2020 -
Research Associate. Department of Astronomy, Cornell University. 08/2020 - 12/2020
Research Intern. Max-Planck-Institut für Astronomie. 05/2019 - 08/2019
Resident Advisor. Holland International Living Center. 08/2017 - 05/2020

Teaching Assistance Experience

AST 320: Introduction to Astrophysics. 2022
AST 251: Life on Other Worlds. Head Grading TA. 2022

AST 201: Stars and Galaxies. 2021
AST 101: Our place in the Universe. 2021

Outreach

University of Toronto Family Care Program. 2022
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.

Cornell Astronomical Society. 2016 - 2020
- Participated on weekly Friday nights; included opening Fuertes Observatory for visitors and operating telescopes including a 100 years old, 12 inches Brashear refractor.

Mentorship

Physics Directed Reading Program 2022-2023
- Supervising two undergraduate students directed reading on cosmology and general relativity.

Graduate Peer Mentor, University of Toronto. 2022
- Mentoring an incoming graduate student.

Juror, Canadian Young Physicists' Tournament (CaYPT). 2022
- Evaluated and provided feedback for tphysics projects by high school students.

Undergraduate Mentor, University of Toronto. 2021
- Mentored two undergraduate students, advising on graduate school admissions and research.

Peer Mentor, Cornell University Department of Physics. 2019

Leadership

Local Organizing Committee, SDSS V. 2022
Local Organizing Committee, CITA Planet Day. 2022
Graduate Astronomy Students Association. 2020 -
- Activities and committees: Course and Qualifying Exams, AstroTours executive, Mentorship, Faculty hire.

Cornell Society of Physics Students. President, Secretary, Webmaster. 2016 - 2020
- Participated in outreach events, such as Sagan Walk and 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 Physics classes; led efforts to foster diversity and inclusion in the Physics major.

Technical Skills

Programming languages (scientific computing): Python, Mathematica, Julia, C++, Rust.
High-Performance Computing: used the DRACO computing cluster (Garching, Germany).
Languages: Vietnamese and English. Fluent.