Pham Qui Nguyen

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Education

2019–2020	University of Rochester, Rochester, NY. **Ph.D. student, Physics**.
2014–2017	Michigan State University (MSU), East Lansing, MI. **B.S., Astrophysics**, with honors. *Awards:* Dean's List (spring and fall semesters 2014 - 2016) Member of the MSU Astronomy Club (2015 - 2016)
2011–2014	Lansing Community College (LCC), Lansing, MI. **A.S., Engineering and Physics**, summa cum laude. *Awards:* Lansing Community College Scholarship and Dean's List (spring and fall semesters 2012 - 2014)

Research Experience

2019–2020	N-body lunar accretion disk dynamics for the Earth-Moon system using `rebound` (Advisor: Dr. Miki Nakajima, University of Rochester)
2017– 2019	Modeling atmospheric loss of sub-Neptune exoplanets using Modules for Experiments in Stellar Astrophysics (`MESA`). Modified Fortran subroutines to model more realistic mass loss coefficients and used Python for high level control of simulations (Advisor: Dr. Ed Brown, MSU)
2016– 2019	Analyzing compositional and $^{40}Ar/^{39}Ar$ ages of Apollo 14, 16, and 17 lunar impact glasses; preparing Apollo 15 lunar glasses for analysis (Advisor: Dr. Nicolle Zellner, Albion College)
2016-2017	Obtained photometric data on cataclysmic variable stars; MSU Observatory Research Program. Photometric results were submitted to the American Association of Variable Star Observers and the Center for Backyard Astrophysics.
2015-2016	Studied alkaliphilic bacteria in high pH subsurface ecosystems using 16s rRNA sequences. Assessed community diversity and correlations between bacterial species and environmental metadata (Advisor: Dr. Matt Schrenk, MSU)

Professional Contributions

Nguyen P. Q. and Zellner N. E. B., 2018, *Using Size and Composition to Assess the Quality of Lunar Impact Glass Ages*, Geosciences

Huang Y., Milton D. A., Zellner N. E. B., **Nguyen P. Q.**, et al., *What do Apollo Impact Glasses tell us about Post-Copernican Impact Flux?* (in prep)

Zellner N. E. B., **Nguyen P. Q.**, Swindle T. D., Beard S., and Isachsen C., 2018, *Apollo 17 Lunar Impact Glasses: Ages Evaluated via Statistical and Compositional Studies*, 49th Lunar and Planetary Science Conference, The Woodlands, TX, March 19-23, Abstract #2487

Zellner N. E. B., Delano J. W., and **Nguyen P. Q.** , 2017, *Major-element compositions for 180 lunar impact glasses selected from Apollo 14 regolith sample 14259,624*, EarthChem Library, doi:10.1594/IEDA/100731

Zellner, N., **Nguyen, P.**, Vesa, O., Cook, R., Blachut, S., Delano, J., Swindle, T., Beard, S., and Isachsen, C., 2017, *Only Specific Lunar Impact Glasses Record Episodic Events on the Moon*, 48th Lunar and Planetary Science Conference, The Woodlands, TX, March 20-24, Abstract #2619

Nguyen, P. Q., and Zellner, N. E. B., 2017, *Using Lunar Impact Glasses to Inform the Amount of Organic Material Delivered to the Early Earth*, 229th Meeting of the American Astronomical Society, Grapevine, TX, January 3-7

Nguyen P. Q., 2016, *Age Assessment and Regional Composition of Lunar Glasses*, Summer Undergraduate Research Colloquium, Albion College, Albion, MI, July

Nguyen, P. Q., Williams, L., and Schrenk, M., 2015, *Phylogeography of Alkaliphilic Heterotrophic Bacteria from High pH Subsurface Ecosystems*, Bio/Computational Evolution in Action CONsortium Congress, East Lansing, MI, August 16-18

Technical Skills

Computer Languages: Python and C++

Software Used: OriginLab

Work Experience

2019–2020

Graduate Teaching Assistant
University of Rochester, Department of Physics and Astronomy
PHY 141: Mechanics (Honors). Duties included grading homework, providing office hours, and running two recitation sections a week.
PHY 121: Self-paced mechanics course. Primarily graded quizzes and ran workshops for students.

2017
January–May

Undergraduate Teaching Assistant
Michigan State University, Department of Physics and Astronomy
Programming lab assistant and grader for the Astronomy 208: Planets & Telescopes course.

Public Outreach

2018–October Presenter to three different 6th grade classes at Fowlerville Junior High School in Fowlerville, MI, *Exoplanets*

2018–March Presenter to the Physics and Engineering Club at Lansing Community College, *The Moon: New Views on Formation and Impact History*

2016–2019 Volunteer at the Michigan State University Campus Observatory public nights

2015–2019 Volunteer at the Fox Park Observatory public nights in Potterville, MI

2014–2017 Student assistant for the Holt High School Science Olympiad team in Holt, MI