Samuel A. Myers

CURRICULUM VITAE July 30, 2024

Rank: Ph.D. Candidate Institution: University of Arizona

Phone: (XXX) XXX-XXXX Department: Lunar and Planetary

Laboratory

Address: Tucson, AZ Email: sammyers@arizona.edu

EDUCATION

Ph.D. - Planetary Science, University of Arizona - Tucson, AZ Exp. 2025 August

M.S. — Planetary Science, University of Arizona - Tucson, AZ 2023 May

— GPA 4.0

B.S. — Physics, University of Idaho - Moscow, ID

2020 May

- General Emphasis
- Honors Scholar Award with Distinction
- Summa Cum Laude

B.S. — Mathematics, University of Idaho - Moscow, ID

2020 May

- Quantitative Modeling
- Honors Scholar Award with Distinction
- Summa Cum Laude

PUBLICATIONS

Published

- 5. Myers, Samuel A.; Howell, Ellen S.; Magri, Christopher; Vervack, Ron J. Jr.; Fernández, Yan R.; Marshall, Sean E. "Constraining the Limitations of NEATM-like Models: A Case Study with Near-Earth Asteroid (285263) 1998 QE2", *The Planetary Science Journal*, Vol 4. Published 10 January 2023.
- 4. Doole, Fathima T.; Littin, Shelley; **Myers**, **Samuel A**; Somasekhar, Gowri; Steyaert, Jennie C.; Lansey, Kevin. "Experiential Learning for Training Future Science Policy and Diplomacy Experts", *Journal of Science Policy & Governance*, Vol 21. Published 17 October 2022.
- 3. Myers, Samuel A.; Barnes, Jason W.; Ahlers, John P. "Constraints on Sub-Neptune Planet Candidate KOI-972.01 via Joint Variability / Gravity-darkening Analysis", *The Planetary Science Journal*, Vol 2. Published 24 February 2021.

- 2. Ahlers, John P.; Barnes, Jason W.; **Myers, Samuel A.** "Dealing with δ-Scutis: Transit Light Curve Analysis of Planets Orbiting Rapidly-Rotating, Seismically Active A/F Stars", *The Astrophysical Journal*, Vol 158. Published 30 July 2019.
- 1. Ahlers, John P.; Barnes, Jason W.; Horvath, Sarah A.; Myers, Samuel A.; Hedman, Matthew M. "LASR-Guided Stellar Photometric Variability Subtraction: The Linear Algorithm for Significance Reduction", *Astronomy and Astrophysics*, Vol 615. Published 26 July 2018.

In Preparation

1. **Myers**, **Samuel A.**; Howell, Ellen S.; Magri, Christopher; Vervack, Ron J. Jr.; Fernández, Yan R. "Differences in Simple Thermal Model Results for NEAs Based on IRTF SpeX and NEOWISE Data" *Submitted*

RESEARCH EXPERIENCE

2020 September - Present

Graduate Research Associate

- University of Arizona, Tucson, AZ
- Dr. Ellen Howell, Advisor
- Modeling of NEAs using NASA IRTF and NEOWISE data

2020 June - 2020 August

Graduate Research Assistant

- University of Arizona, Tucson, AZ
- Dr. Daniel Apai, Advisor and PI
- Feasibility study of O₂ detections with ELTs

2016 September - 2020 May

Undergraduate Research Assistant

- University of Idaho, Moscow ID
- Dr. Jason Barnes, Advisor
- Studying exoplanet formation via Kepler data

SCIENCE POLICY/ADVOCACY WORK

- 6. Worked with team to establish a Science Policy and Technology Fellowship for the Arizona Legislature. Ongoing.
 - Recruited experts from around the state to advise on the program
 - Helped with long term goal setting and strategizing
 - Met with members of Legislature and legislative staff to plan fellowship
 - Prepared and delivered presentations and videos to communicate project goals and progress
- 5. Worked with Arecibo Science Advocacy Partnership to advocate for Arecibo Telescope. Ongoing.

- Coordinated efforts to advocate to US Congress, especially the office of Rep. González-Colón (R-PR).
- Co-led efforts to get H.Res.827 introduced and S.Res.467 introduced and passed in the 117th Congress to support the Arecibo Telescope.
- Helped with organization restructuring to better suite ongoing needs.
- 4. Participant in US State Department Diplomacy Lab researching energy issues in the Lower Mekong. Fall 2021.
 - Researched current and predicted energy usage as well as energy usage climate effects; recommended programs to address long term sustainability issues.
 - Presented results to State Department leadership
- 3. Union of Concerned Scientists Climate Action Day, Virtual. Participant. 14 July 2021.
 - Discussed importance of passing climate legislation with offices of Sen. Sinema (D-AZ), Sen. Kelley (D-AZ), Rep. Kirkpatrick (D-AZ), and Rep. O'Halleran (D-AZ).
- 2. American Astronomical Society Congressional Visit Day, Virtual. Participant. March 2021.
 - Discussed importance of increasing space sciences funding and supporting the Arecibo telescope with offices of Sen. Sinema (D-AZ), Sen. Kelley (D-AZ), Rep. Kirkpatrick (D-AZ), and Senate Committee on Commerce, Science, and Transportation.
- 1. American Geophysical Union Science Climate Change Virtual Advocacy Days, Virtual. Participant. 11-17 October 2020.
 - Discussed importance of climate legislation with specific regards to water and energy usage in Arizona with offices of Sen. Sinema (D-AZ), Sen. McSally (R-AZ), and Rep. Kirkpatrick (D-AZ).

SELECTED GRANTS AND FELLOWSHIPS

Funding Institution: National Conference of State Legislatures

Gordon and Betty Moore Foundation

Name: State Science Policy Fellowship Planning Grant Initiative

Award Period: November 2023 - November 2024

Status: Accepted

Funding Institution: National Science Foundation Name: Graduate Research Fellowship Program Award Period: September 2022 - September 2025

Status: Accepted

Funding Institution: University of Idaho College of Science

Name: Hill Undergraduate Research Fellowship

Award Period: January 2019 - May 2020

Status: Ended

Funding Institution: University of Idaho Office of Undergraduate Research

Name: Summer Undergraduate Research Fellowship

Award Period: June 2019 - August 2019

Status: Ended

SELECTED AWARDS AND HONORS

2024 May — Lunar and Planetary Laboratory Leif Erland Andersson Award for Service and Outreach

2022 August — Lunar and Planetary Laboratory Conference Graduate Speaker Award

2020 August — Lieutenant Colonel Kenneth Rondo Carson and Virginia Bryan Carson Graduate Fellowship

2020 May — College of Science John B. George Award

2020 May — College of Science Dean's Undergraduate Award

2020 May — Department of Mathematics Chair's Award for Excellence

2019 October — University of Idaho Alumni Award for Excellence

2019 April — Barry M. Goldwater Scholar

2018 October — Outstanding Undergraduate Research Award

2018 March — Barry M. Goldwater Scholarship Honorable Mention

2016 June — Archbishop Murphy High School Valedictorian

2016 February — National Merit Scholar

SELECTED CONFERENCE PARTICIPATION

Invited

1. University of Arizona Lunar and Planetary Laboratory Conference, Tucson AZ. **Myers, Samuel A.** "Exploring the Endless Frontier: Science Policy for the Planetary Scientist", **Oral**, 18 August 2023.

Contributed

- 11. Small Bodies Assessment Group 30th Meeting, Tucson, AZ. Myers, Samuel A.; Howell, Ellen S.; Magri, Christopher; Vervack, Ron J. Jr.; Fernández, Yan R.; Hinkle, Mary L.; Marshall, Sean E.; McFadden, Kiana D. "Differences in Simple Thermal Model Results for NEAs Based on IRTF SpeX and NEOWISE Data", Oral, 30 January 2024.
- 10. American Astronomical Society Division for Planetary Sciences Meeting, San Antonio, TX. **Myers, Samuel A.**; Howell, Ellen S.; Magri, Christopher; Vervack, Ron J. Jr.; Fernández, Yan R. "Differences in NEA Simple Thermal Model Results Between IRTF SpeX and NEOWISE Data", **Oral**, 6 October 2023.
- 9. American Astronomical Society Division for Planetary Sciences Meeting, London, Canada. Myers, Samuel A.; Howell, Ellen S.; Magri, Christopher; Vervack, Ron J. Jr.; Fernández, Yan R.; Marhshall, Sean E.; Taylor, Patrick A. "Comparison of NEATM-like Models with NASA IRTF and NEOWISE Observations of Near-Earth Asteroid (285263) 1998 QE2", Oral, 3 October 2022.
- 8. University of Arizona Legal Empiricism and Discussion Society Annual Conference, Tucson AZ. Littin, S.; Doole, F.; Steyaert, J.; Myers, S. "Policy Recommendations for Sustainable Climate Adaptation Strategies in the Mekong Region", Oral, 8 April 2022.
- 7. United States Department of State Diplomacy Lab Demo Day, Virtual. Doole, F.; Littin, S.; Myers, S.; Steyaert, J. "Enhancing Mekong River Region Food, Water, and Energy Security in a Changing Climate", Oral, 11 February 2022.
- 6. American Astronomical Society Division for Planetary Sciences Meeting, Virtual. Myers, Samuel A.; Howell, Ellen S.; Ferńandez, Yan R.; Vervack, Ron J. Jr.; Marshall, Sean E.; Taylor, Patrick A. "Comparisons of NEATM-like Models for NEAs with NASA IRTF and NEOWISE Data", Poster, Live Q&A session, 6 October, 2021.
- 5. European Planetary Science Congress Division for Planetary Sciences Joint Meeting, Geneva, Switzerland. **Myers, Samuel A.**; Barnes, Jason W.; Ahlers, John P. "Using Gravity Darkening and Asteroseismology to Measure the Misalignment of KOI-972.01", **Oral, Presented by second author**, 15-20 September 2019.
- 4. Idaho Conference on Undergraduate Research, Boise ID. **Myers**, **Samuel A.**; Barnes, Jason W.; Ahlers, John P. "Constraining Planetary Formation with Gravity Darkening on Variable Stars", **Poster**, 30-31 July 2019.
- 3. Western Regional Honors Council Conference, Bozeman MT. Myers, Samuel A.; Barnes, Jason W.; Ahlers, John P. "Constraining Theories of Planetary Formation and Evolution", Oral, 29-31 March 2019.
- 2. American Astronomical Society Winter Meeting, Seattle WA. Myers, Samuel A.; Barnes, Jason W.; Ahlers, John P. "Using Gravity Darkening on Variable Stars to Constrain Planetary Formation Theories", Poster, 8 January 2019.

1. American Astronomical Society - Division for Planetary Sciences Meeting, Provo, UT. Horvath, Sarah A.; Myers, Samuel A.; Ahlers, John P.; Barnes, Jason W. "LASR-Guided Variability Subtraction: The Linear Algorithm for Significance Reduction of Stellar Seismic Activity, Poster, 19 October 2017.

MEMBERSHIPS AND AFFILIATIONS

Arecibo Science and Advocacy Partnership

Current Member

 Co-Chair of Advocacy and Outreach Sub-Committee, January 2023 -July 2024

American Astronomical Society Division of Planetary Sciences Current Member – Student Representative (national position elected by membership, term October 2022 - October 2024)

Science Policy and Diplomacy Cats (SPDi Cats)

Co-Founder

- Science Policy and Diplomacy student organization at the University of Arizona
- Treasurer (August 2022 May 2023)

Arizona Science Policy Network

Former Member

- Did position research for AZ 2020 Senate election debate op-ed
- Did research for 2020 election state ballot initiatives voter guide

COMMUNITY INVOLVEMENT

2023 April - Present — Graduate Student Faculty Representative, University of Arizona Lunar and Planetary Laboratory

2024 July - Prescott Astronomy Club Guest Speaker

2024 February — University of Idaho Career Info Session Panelist – 2023 April

2024 February — Spendido Intellectual Pursuits Program Speaker – 2022 February

2023 February — Huachuca Astronomy Club Guest Speaker

 $2021\ \mathrm{November}$ - $2023\ \mathrm{September}$ — Math tutor for local middle school student

2020 October — Sonora Astronomical Society Guest Speaker

2019 October — Moscow High School Science Field Day Speaker

2019 July — University of Idaho Apollo 50 Guest Speaker

2019 March — Invent Idaho State Finals Judge

2018 September - 2020 May — University of Idaho Honors Program Mentor

2018 January - 2018 May — University of Idaho Residence Hall Association President

2017 May - 2018 January — University of Idaho Residence Hall Association Vice-President

TECHNICAL SKILLS

Familiarity with Windows and Linux Operating Systems

Proficiency with Microsoft and Google office software suites

Proficiency with LaTeX

Proficiency with R

Familiarity with C++, IDL, and TADS3

MEDIA COVERAGE

2024 March — Cassiopeiabloggen

2022 March — University of Arizona News

2021 September — Guest Blogger, Union of Concerned Scientists Blogs

2019 September — University of Idaho College of Science Lab Report

2019 March — University of Idaho Vandals in Focus

2018 October — The University of Idaho Argonaut