#### Samuel A. Myers CURRICULUM VITAE October 14, 2024

Rank:	Ph.D. Candidate	Institution:	University of Arizona
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#### **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.
- 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  $\delta$ -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" *In Press* 

### **RESEARCH EXPERIENCE**

2020 September - Present

- University of Arizona, Tucson, AZ
- Dr. Ellen Howell, Advisor
- Modeling of NEAs using NASA IRTF and NEOWISE data
- 2020 June 2020 August
  - University of Arizona, Tucson, AZ
  - Dr. Daniel Apai, Advisor and PI
  - Feasibility study of  $O_2$  detections with ELTs

2016 September - 2020 May

- 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.

Graduate Research Assistant

Undergraduate Research Assistant

Graduate Research Associate

- 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 - May 2025
Status: Accepted

Funding Institution: National Science FoundationName: Graduate Research Fellowship ProgramAward Period: September 2022 - September 2025Status: 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 ResearchName: Summer Undergraduate Research FellowshipAward Period: June 2019 - August 2019Status: 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

- American Astronomical Society Division for Planetary Sciences Meeting, Boise, ID. Myers, Samuel A.; Howell, Ellen S.; Fernández, Yan R.; Marshall, Sean E. "Guidance for Using NEOWISE Data for NEA Observations", Poster, 9 October 2024.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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, 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 November - 2023 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 IDL, C++, Java, 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