# Samuel A. Myers

CURRICULUM VITAE December 1, 2023

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**

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  $\delta$ -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 Prep* 

#### 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 O<sub>2</sub> 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
- 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).
  - 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.
- 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

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

- 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", Talk, 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 Present
- 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.

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

2023 April — University of Idaho Career Info Session Panelist

2023 February — Huachuca Astronomy Club Guest Speaker

2022 February — Spendido Intellectual Pursuits Program 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

 $2017\ \mathrm{May}$  -  $2018\ \mathrm{January}$  — 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++ and IDL

## **MEDIA COVERAGE**

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