

# Katelyn Horstman

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## Education:

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**University of California, Los Angeles (UCLA)**

**June 2021**

Bachelor of Science in Astrophysics with Departmental Honors

**California Institute of Technology (Caltech)**

**Expected: June 2027**

Doctor of Philosophy in Astrophysics

## Selected Publications:

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Ruffio, J. B., **Horstman, K.**, Mawet, D., et al. (2022). Detecting exomoons from radial velocity measurements of self-luminous planets: application to observations of HR 7672 B and future prospects. *Submitted to the Astronomical Journal*.

**Horstman, K.**, Fitzgerald, M. P., Lyke, J. E., et al. (2022). Using Non-negative Matrix Factorization to Improve Calibration of the Keck OSIRIS Integral Field Spectrograph. *Publications of the Astronomical Society of the Pacific*, 134:1036. <https://doi.org/10.1088/1538-3873/ac7905>.

**Horstman, K.**, Shapley, A. E., Sanders, R. L., et al. (2020). The MOSDEF Survey: Differences in SFR and Metallicity for Morphologically-Selected Mergers at  $z \sim 2$ . *Monthly Notices of the Royal Astronomical Society*, 501:1. <https://doi.org/10.1093/mnras/staa3502>.

**Horstman, K.** & Trimble, V. (2020). Correlation of Time from Submission to Acceptance of Astronomical Papers with Gender of Lead Author. *Bulletin of the AAS*, 52:2. <https://doi.org/10.3847/25c2cfcb.907653b3>.

**Horstman, K.** & Trimble, V. (2019) A citation history of measurements of Newton's constant of Gravity. *Scientometrics* 119:527. <https://doi.org/10.1007/s11192-019-03031-0>.

## Selected Presentations:

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**Horstman K.**, Ruffio J. B., and Mawet D. The prospects of discovering exomoons: Radial velocity measurements around self-luminous planets. Powerpoint session presented at: ESO Disks and Planets; 2022 November; Garching, Germany.

**Horstman K.** My Journey to Graduate School. Powerpoint session presented at: FUTURE Ignited; 2022 October 8; Virtual.

**Horstman K.** and Fitzgerald, M.P. Using Non-negative Matrix Factorization to Improve Calibration of the Keck OSIRIS Integral Field Spectrograph. Powerpoint session presented at: 240th AAS Meeting; 2022 June 13; Pasadena, CA.

**Horstman K.** and Shapley A. SFR-M-Z and Merger Relationship at a Redshift of 2.2. Powerpoint session presented at: Undergraduate Research Week 2021; 2021 May 28; Los Angeles, CA.

**Horstman K.**, Ruffio J. B., and Mawet D. Extracting Radial Velocities of Cool, Low Mass Stars Using Forward Modeling with PARVI. Oral presentation presented at: Fall Summer Undergraduate Research Fellowship Day; 2020 October 17; Pasadena, CA.

## Service:

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**Zeitschrift für Naturforschung A.**  
*Blind Reviewer*

**Los Angeles, CA**  
*May 2019*

**Rotary Club Community Observatory**  
*Docent and Telescope Operator*

**Cameron Park, CA**  
*Jan 2017 - Sep 2017*

- Taught public community members about astronomy and astrophysics
- Operated 17" and 14" telescopes
- Conducted constellation tours CV

## Awards and Scholarships:

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NSF Graduate Research Fellowship Recipient

*March 2023*

Keck Institute for Space Studies (KISS) Affiliate

*September 2022*

NSF Graduate Research Fellowship Honorable Mention

*February 2021*

UCLA Clay Trust Physical Science Scholarship

*February 2020*

## Extracurriculars:

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Gender Minorities in Physics, Math, and Astronomy (Board)

*Sep 2021 - Present*

Women+ in Physical Sciences

*Sep 2017 - June 2021*

American Physical Society

*Sep 2017 - June 2021*

Society of Physics Students

*Sep 2017 - June 2021*

Marginalized Identities in Astrophysics

*Sep 2017 - June 2021*